

St. Bartholomew's Hospital



Journal

"Æquam memento rebus in arduis
Servare mentem."
—Horace, Book ii, Ode iii.

VOL. XLV.—No. 4

JANUARY 1ST, 1938

PRICE NINEPENCE

CALENDAR

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The Court of the Governors was assembled in the Great Hall, together with a large number of the Nursing Staff. In the Square were gathered the students to give welcome to the Duke.

As the Royal car drove into the Square His Royal Highness was given a rousing cheer before

he was led into the Great Hall. Here he was received by the Treasurer and Governors.

The Treasurer, Mr. George Aylwen, greeted the Duke with the expression of the loyalty of the Hospital and its gratitude for his personal example of service. Mr. Aylwen reminded the Duke how, in 1123, the Hospital received its first Charter from Henry I, and then later how another Henry, this time Henry VIII, stirred up the Hospital, and only allowed the Charter to remain at a price. Now the

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presence of Henry of Gloucester was to cheer on our future efforts.

The Duke of Gloucester then received the charge of a Governor and the charge of President of the Hospital. As President the Duke keeps alive a family tradition, for before him his elder brother, his father and his grandfather have all been Presidents of the Hospital.

The Dean then came forward to offer to His Royal Highness the title of "Perpetual Student". This is the highest honour which it is in the power of the Medical College to confer. The Duke accepted the title and signed the following declaration :

"I, the undersigned, hereby undertake as a condition of my admission as a student of St. Bartholomew's Hospital, to conform to the rules and regulations of the Hospital and of the Medical College thereof ; and I acknowledge that permission to attend the Hospital is given on condition that my work and conduct remain satisfactory to the Treasurer of the Hospital and to the Medical Officers."



Before the Duke of Gloucester departed he said that he hoped soon to have an opportunity of visiting the Hospital, and that from now on he would always take the closest personal interest in its welfare and activities.

We all look forward to his second visit.

THE NEW YEAR

Christmas has passed and the Hospital is fast returning to normal after the holiday feasting and revelling. Even the goldfish in the Fountain can swim about once more without fear of interruption.

The year that has ended has seen many enterprises conceived and brought to a fair conclusion. A new block is here to tell us that our Hospital never stands still. Her face is always set towards the future.

We are no sages to prophesy in detail what this fresh year holds in store. But one thing is certain, the Hospital of St. Bartholomew will never rest.

Her founder's wish will be honoured and the sick will be tended and healed. Each year can increase her greatness.

THE CHISLEHURST APPEAL

The response to the Dean's appeal for money towards the New Sports Ground at Chislehurst has been most disappointing. So far only two old Bart.'s men have responded. We can only account for this apathy by supposing that most people stopped reading their JOURNAL after the first page and failed, therefore, to reach the Correspondence. This month they shall have no such excuse.

The position is briefly this. By selling Winchmore Hill £20,000 was raised, which was sufficient to pay for the new Chislehurst ground and also to pay for the erection of a Pavilion upon it. However, an additional £2,000 is still required to pay for such essentials as levelling, tree-planting, fencing, the laying down of tennis courts, and the provision of a car park.

Now the Dean has been lately appealing for money for the completion of the Medical College, so that many Bart.'s men will feel that they have done their share, but, as the Dean points out, only 50% of all the Old Bart.'s men responded to his College Appeal. Surely the remaining 50% will not allow themselves to be appalled by the comparatively small sum of £2,000 which remains to be collected. One visit to Chislehurst should resolve their doubts.

PAYING PATIENTS

Until 1935, by the terms of the original Charter, the Hospital was only able to receive patients who could be described as "the sick poor". In 1935 the St. Bartholomew's Hospital Act was passed, which allowed the Governors to erect and maintain buildings for paying patients, provided that the cost of so doing should not come from the general funds of the Hospital, but from some outside source.

It has, however, proved impossible to raise the £120,000 needed for this development.

We now learn that the Governors have deposited a Bill in the Private Bill Office of the House of Commons to enable them to use the General Funds of the Hospital for this purpose, as well as for the provision of accommodation for the resident medical staff and the nurses who would be needed in this new block.

CURRENT EVENTS

THREE APPOINTMENTS

Mr. George Aylwen has been appointed Treasurer to the Hospital in succession to Lord Stanmore. We wish to extend a very warm welcome to him. We are confident that the Financial Policy of the Hospital could not be in sounder hands than those of Mr. Aylwen, who is a stockbroker of wide experience.

It gives us very special pleasure to congratulate Miss Dey on her re-election to the General Nursing Council. In these days particularly her progressive spirit will be an inspiration to her colleagues.

We also wish to congratulate Col. N. M. Wilson, of the Indian Medical Service, on his appointment as an Honorary Surgeon to the King.

CAMBRIDGE GRADUATES' CLUB (FOUNDED 1876)

At the Fifty-seventh Meeting of the Club 152 members and guests sat down to an excellent dinner at the Mayfair Hotel. This record number was due partly to the fact that Dr. Geoffrey Evans was in the Chair, and partly to great efforts by the secretaries. It appeared that the proportion of members to guests was about three to one, and it was noticeable that many unqualified students were amongst those present. This was as it should be, but in recent years a kind of tradition has arisen that this dinner is intended primarily for qualified men. New members should note that this is not so and that all are welcomed.

In proposing "The Club" Dr. Geoffrey Evans (a graduate of Trinity) quoted, of Lord Nelson, that he was "although not a Trinity man yet nevertheless a man of whom England might be proud", and later took a tilt at the Hospital JOURNAL for associating him on one occasion with the Oxford Group and on another with the Socialist Society. Recalling student days he said: "We spent our evenings learning Medicine, Surgery, Midwifery—and drinking beer." The senior secretary, Mr. Reginald Vick, reminded the assembled company that though many of them were not Trinity men yet they were still God's creatures, and added, "It is customary to probe into the private life of the Chairman without any reference to truth". The worst he could reveal, however, was that Dr. Evans had coxed the first Trinity boat to the head of the river.

Dr. Hadfield proposed the health of the guests, for whom wittily replied Dr. C. M. Hinds Howell (M.D.

Oxon.), with a neat reference to George Bernard Shaw and the students of St. Andrew's. Later the majority reassembled at Mr. Vick's Harley Street house for the traditional recitation of "Hairy Rouchy", this year told by Sir Alan Moore, son of Sir Norman Moore. Col. Eric Barnsley gave some inimitable entertainment of a rather gynæcological nature and the guests departed a little before midnight.

THREE PRESENTATIONS

In the Library there is on view the silver plate which is being presented to Dr. Wilfred Shaw by the Students' Union. It bears the inscription, "To Wilfred Shaw from the Students' Union of St. Bartholomew's Hospital in grateful recognition of his services as Treasurer 1928-1937". Being Treasurer of the Students' Union is no sinecure, and we are sure that all students wish to thank Dr. Shaw for his efficient and unobtrusive work on their behalf.

Mr. Thomas Hayes has also received a present. His was a silver figure of Rahere executed by Omar Ramsden. The presentation was made by the members of the Medical Staff of the Hospital. It would be difficult to imagine a more fitting reminder of his continual work for the Hospital.

The last presentation is to the Editor of the JOURNAL and to all subsequent and as yet unborn editors. It is a copy of *A Short History of St. Bartholomew's Hospital 1123-1923*, given by Mr. Geoffrey Keynes. The Editor wishes on behalf of his successors and of himself to express his gratitude to Mr. Keynes for such an inspired idea.

GOOD INVESTMENTS

As we announced in last month's JOURNAL, Sir Milsom Rees has founded three £100 scholarships for the sons of medical men at the PORT REGIS PREPARATORY SCHOOL. Sir Milsom Rees is an old Bart.'s man himself, and as a result of a good response last year one of these three scholarships is limited to the sons of old Bart.'s men.

The scholarship examination takes place on March 1st this year, and entries or inquiries should be addressed to the Headmaster, Port Regis School, Broadstairs.

The other good investment is the LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY. In November we advised recently qualified men to think about

joining the Medical Defence Union. Sir Charles Gordon Watson has reminded us that the London and Counties Medical Protection Society serves a similar purpose and also has many old Bart.'s men on its list of members. Sir Cuthbert Wallace, who is President of the Royal College of Surgeons, is the President of this Society. No higher recommendation is needed. We beg to apologize for our previous omission.

DID HE BATH YOU ?

Mr. Martin, the Hospital Bath Attendant, is retiring after forty years of vigorous bathing. In an interview in his bath-garage, where models dating from 1874 are still to be seen, Mr. Martin told us something about baths.

In the days when Mr. Martin first started, the baths were filled from boilers set at the side of the large coal fires in each ward instead of from the big central heaters now in use. The bath is not the straightforward affair which most people believe. There are fashions in baths—soda baths for rheumatism used once to be the vogue, and sometimes even bran baths were given to patients suffering from skin conditions. One patient had as many as 600 of these.

Mr. Martin's memory stretches back for many years—he can remember his first week's salary was 6d.; he can remember Matron when she was a probationer—she always gave him "sterilized towels" when he asked. That is why!

We give him our warmest congratulations and offer him our best wishes for a happy retirement.

A CHALLENGE TO NURSES

A very big step towards solving the more urgent nursing problems has been taken by the College of Nursing. In a letter addressed to the secretaries of the Student Nurses' Associations in the various hospitals, the College authorities call for suggestions on the Recruitment of Nurses, the Economic Conditions, and the Education of Nurses. They also suggest that a Central Committee, formed of representatives of the Student Nurses' Associations, should be set up to discuss these particular problems and all others affecting the nursing profession.

This direct appeal to the nurses themselves is one of the best things which has as yet resulted from the recent extensive publicity. We hope very much that this opportunity will be seized and used really constructively.

A CUCKOO IN THE NEST

We have heard of people whistling for duck, but never before of men who shouted "cuckoo" from

sheer *joie de vivre*. It does happen, however, and it happens here.

One morning, as we came in at the gate we saw the crowds being scattered by a small blue car, containing Mr. Rodgers, from which an unmistakable "Cuckoo" was coming. Those who lean to the facile explanation that the noise was due to the car itself are, we are sure, deceived.

It is amazing what these surgeons will do just after breakfast.

THE REFECTORY

The Catering Company is to be heartily congratulated on the Suggestion Book which has appeared in the Refectory. The Company is bound to benefit by showing such willingness to listen to new ideas. Also it is notorious that grumblers are soon silenced when they are asked to do something practical.

Maybe we won't go to the Nurses' Dining Room after all!

HOSPITAL ART EXHIBITION

As a result of the enthusiasm expressed in the JOURNAL last month on this subject, the Students' Union Council has appointed a committee to organize an Art Exhibition sometime in the Spring. It would help the committee if all those who are prepared to submit pictures would send their names to the Editor of the JOURNAL, stating the number of pictures forthcoming and in what medium they are executed.

This exhibition is open to students, nurses and Old Bart.'s men. We hope that no lack of entries will prevent us from being able to stage a really representative show.

It has not been yet decided if photographs will be accepted or not. Further opinion on this subject will be welcome.

THE SOCIALIST SOCIETY

Our Secret Society is seeking the limelight and becoming respectable: that is if the eminence of its speakers is any criterion.

Posters proclaimed that Lord Horder was to speak in a debate, and an expectant flock gathered, only to hear that at the last moment he had been prevented from coming; however none wished, or dared to leave, and the meeting proceeded.

The subject was "The Preservation of Peace", and though there was great diversity of opinion as against whom the next war should be, the only speaker who kept to the subject was a Pacifist. Against him more prejudice was used than argument.

ORIGIN OF THE FILL-UPS

The old prescriptions which we are using as Fill-ups are taken from a book attributed to Robert Boyle—of Boyle's *Law* fame. It is called *Medicinal Experiments or a Collection of Choice and Safe Remedies*, 1696. The remedies are certainly choice, but whether they are safe or not we do not presume to say. Our thanks are due to the Sister of the Special Department for her very kind loan of the original book.

NEWS FROM OUTSIDE

The Statistics Bill, of which we gave notice in our last issue, reached its second reading some weeks ago but passed in no way without comment. First of all the Minister of Health found himself accused of introducing the Bill not for a second but for a third reading—this being a reference to an article under his name in the London *Daily Express* popularizing the measure on the morning before its being read a second time; then the Opposition proceeded to find it "one of the most dangerous measures introduced to the House since the Sedition Bill"—a reference to the powers it would confer on Registrars to ask "any number of questions up to eight each, to a man and his wife, on registering a birth." Mr. A. P. Herbert went on to suggest just what such questions might be, and developed his theme with such verve and originality that the next day Hansard was literally a best-seller and finally ran out of print and then into a second printing for, it is believed the first time in the history of Parliamentary reporting.

* * *

A private member's Bill to regulate the **Conditions of Employment of Nurses** was introduced for second reading, which was refused by the small majority of eleven votes following a discussion in which members showed a great lack of familiarity with the subject which it is to be hoped that the Inter-Departmental Inquiry will clear up. Having disposed of this measure in three and a half hours of interesting, but largely irrelevant talk, Parliament proceeded to give its blessing to a Bill for the Protection of Quails without one word being said.

* * *

There appears to have been recently a widespread infection by **Sonne's Bacillus**, a typical dysentery being reported in all parts of London; this, together with the Croydon epidemic, raises very sharply the

question of how such infections are carried. It is our opinion that more attention should be given to milk as a possible means of carriage of infections of this group. It is obvious that the bulk transport of milk gives excellent opportunity for infection to spread from one sample to the whole supply of quite a large area. Methods of pasteurization do not seem to be wholly reliable, particularly "flash sterilization" of large bulks of milk; in any case it is waste of time to pasteurize milk if the delivery bottles are not to be sterilized also. The National Government in its White Paper on Milk Policy was inclined to recommend "pasteurization by local option", which would mean, as the necessary plant is expensive, that nothing would be done at all except in the more prosperous cities. There are indications, however, that the Government may shoulder the responsibility more directly in the near future, since the public may well one day discover that milk is a culture medium as well as a food.

* * *

Recent Advances (from Fleet Street workers): " . . . operations with the popular titles of 'left nethrectomy' 'litholotaxy' and 'supratubic prostar-tectomy'. The latter was the operation performed on Mr. Lloyd George and Lord Baden Powell."

Scoop by *Illustrated London News*: Photograph (× 400) of B. Coni Communis. The burrows did not show.

"WHAT I ALWAYS SAY IS"

At last these unique and entertaining Surgical Aphorisms of Mr. Cozens Bailey have been gathered together in

PAMPHLET FORM

Old Students have sent in remembered Aphorisms from all parts of the world to swell those already published in the Journal and to make this collection the wittiest and saltiest ever put before our Readers.

Only a limited number of these Pamphlets will be printed. They are available on application to the Journal Office, St. Bartholomew's Hospital.

Net Price, 6d. Post Free, 7½d.

DR. JEKYLL DIAGNOSES MR. HYDE

(This Address, which was given at the Inaugural Meeting of the Abernethian Society on October 14th, 1937, by Sir Walter Langdon-Brown, was published in a rather different form in the West London Medico-Chirurgical Journal. We reproduce it here by kind permission of the Editor of that Journal.)

MR. PRESIDENT, LADIES AND GENTLEMEN,

Just forty-three years ago in this Lecture Theatre I heard Sir James Paget deliver the Inaugural Address of the Abernethian Society's session. He only visited the Hospital once more; it was in May, 1895, when the Society celebrated its centenary, and well I remember the warmth with which we welcomed him. As Sir James entered the Hospital in 1834 and read his first paper before our Society the following February, I cannot but be impressed on an occasion such as this with a sense of that continuity which is one of our most valuable assets. You can realize therefore that it is a deeply appreciated honour and a source of pride to be asked to address you in this theatre so full of memories for me, in this Hospital where more than half my life was spent.

A little more than half a century ago the reading public was gripped by the story of "Dr. Jekyll and Mr. Hyde", which appeared, as I well remember, as a slim, paper-covered booklet. Although Robert Louis Stevenson had been writing for several years, he had leapt into fame only two years before with the publication of *Treasure Island*. R. L. S. is not much to the modern taste I fear, but those of us whom in youth he invited to gaze through magic casements into the fairy-land of his imagination are not likely to forget him. Moreover the medical profession owe to him the most graceful compliment we have ever received.

It is usually said the idea of Jekyll and Hyde came to him in a dream. That is true, but it is only half the truth. His biographer Graham Balfour says: "A subject much in his thoughts at this time was the duality of man's nature and the alternation of good and evil; and he was for a long while casting about for a story to embody this central idea. Out of this frame of mind had come the sombre imagination of 'Markheim', but that was not what he required." Do you remember how Markheim the murderer listens in his victim's shop to the many clocks ticking out the minutes to his detection? Then he hears someone coming quietly up the stairs; the door is opened and he is

confronted by his former self. But Stevenson could not find the story he wanted till one night he had a dream. In the small hours of one morning Mrs. Stevenson was awakened by cries of horror from her husband. Thinking he had a nightmare, she roused him. He said angrily, "Why did you wake me? I was dreaming a fine boggy tale". She had awakened him at the first transformation scene, but he found himself in possession of three of the scenes in the *Strange Case of Dr. Jekyll and Mr. Hyde*. He dreamed these scenes in considerable detail, and so vivid was the impression that he wrote the first draft of the story off at a red heat, just as it had presented itself to him in his sleep.

I need only remind you that Jekyll discovered a drug which transformed him into the degraded Hyde and back again at will. As time goes on, the transition downwards becomes easier and in time automatic, while the reverse step grows more difficult and finally impossible. If the moral is obvious, the art with which it is conveyed is exquisite.

Stevenson often drew his characters from life. The original of Utterson in this story was his father's lawyer; Long John Silver of *Treasure Island* was W. E. Henley the poet, and Attwater of *The Ebb Tide* was Dew-Smith, one of the founders of the Cambridge Scientific Instrument Company. Sir D'Arcy Power tells me that Dr. Jekyll was a composite portrait, greatly modified of course, of Dr. Radcliffe, then living in Cavendish Square, and Dr. Anstie of Welbeck Street. Radcliffe was a man of fine presence, but whose whole aspect was apt to be distorted by rage; Anstie was in the habit of experimenting on himself to a dangerous extent with drugs.

The point I want to emphasize is that the dream came into a mind already prepared, as indeed all dreams do. The affairs of the day, wish-fulfilment, unsolved problems, eruptions from the unconscious, all such things are the stuff that dreams are made of.

It is significant that Stevenson wrote in a letter to his cousin, "The prim obliterated polite face of life, and the broad bawdy and orgiastic or mænadic foundations form a spectacle to which no habit reconciles me". Indeed it was a contrast to which he frequently turned. *The Travelling Companion* was a story dealing with his sense of man's double being, but it was rejected by the publisher and the manuscript was burnt by the author. Stevenson's latest biographer, Janet Adam Smith, very aptly points out how the City of Edinburgh itself symbolized for him that sense of double being:

"Socially, Edinburgh was to him a double-faced and deceitful city. There was the polite façade, the squares and crescents of the New Town and the suburbs, filled

with people who, in his opinion, married, had children, gave dinner-parties, and went to church on Sundays, not because these things were good or kind or honest in their own right, but because they were socially correct. Behind the prim exterior of the New Town there was the roaring, drunken life of the High Street and Leith Walk and the Lothian Road; and beneath the frock-coats of the most respectable citizens often lurked malice and brutality and dishonesty. Deacon Brodie, an eighteenth-century embodiment of this duplicity, cabinet-maker by day and housebreaker by night, was the subject of one of Stevenson's earliest stories; and the fable of Jekyll and Hyde has an obvious application to his view of Edinburgh. The realization of the two-sidedness of the city—and, indeed, of human nature in general—struck Stevenson with all the more force because he had been so carefully kept from seeing anything of it as a child or boy."

Indeed no one with any imagination can fail to be impressed by the vivid contrasts presented by Edinburgh: "the sight of Highland Hills round a street corner, or, at the end of an alley, ships tacking for the Baltic"; "the building up of the city on a misty day, house above house, spire above spire, until it is received into a sky of softly glowing clouds"; the castle on its rock, and the grimy, smoky trail of the trains through the heart of the public gardens; somewhat self-consciously the Modern Athens with a tattered hem of murky slums round the old Canongate. At every turn one is reminded of Winifred Holtby's vivid phrase, "We have lost our tails but have not yet grown wings".

It is not surprising that the creative artist was alive to the division of personality before the medical profession, despite the writings of Morton Prince, appreciated its full significance. Sir James Barrie calls his puckish, freakish *alter ego* McConnachie, George Moore called his Moro, whom he blamed for his lapses from good taste. Sir William Osler christened his familiar spirit Egerton Y. Davis, the initial standing for that fellow of infinite jest—Yorick. Any editor who received an article with that signature had best be on his guard and keep a sharp look-out for subtle hidden and sometimes Rabelaisian meanings. For the boy who smoked out the school matron with a bowl of burning molasses and pepper survived in Osler to the end. Mr. Kenneth Walker boasts the possession of at least four personalities. As long as this recognition of dual or multiple personalities is conscious it does no harm. But sometimes this second personality gains the upper hand. Of this I will give two examples; in the first the results were harmful, while in the second they appeared to be actually beneficial.

In a remarkable novel, *Hadrian the VIIth*, by Rolfe,

an Englishman achieves the triple tiara and takes the title of Hadrian, because it is the same as that taken by Nicholas Breakspear, the only Englishman who ever became Pope. He renounces all claim to temporal power, aiming at solely a moral sovereignty over Europe. The people applaud, the Cardinals are scandalized, and Hadrian is killed by an assassin's bullet. Those who knew the author realized that he was always seeing himself as Pope, and as he was not treated as Pope, he was fiercely resentful. He took the title of Baron Corvo—where gained no one knows—and he became more and more overbearing, quarrelsome and impossible in every relationship of life. He saw the hand of an enemy in every misfortune; and where he saw an enemy he struck. The fantastic image of himself that he constructed overflowed into real life; the conflict became an external instead of an internal one. His condition was perilously near a psychosis, if it did not actually become one.

The second illustration is that of John Henry Shorthouse, the author of *John Inglesant*. He proved to be emphatically a man of one book, but that book continued to have readers and admirers more than half a century after its first appearance.

Then in 1925 came a bombshell into literary circles when W. K. Fleming published an article in the *Quarterly Review* entitled, "Some Truths about *John Inglesant*". He had discovered that this much-admired book was a regular mosaic of borrowed gems. The "liftings" were sometimes paragraphs, sometimes whole pages from many works. The extraordinary thing is that many extracts had been taken from books that are still read, and not merely from recondite sources. Yet the book had been published forty-four years before this was detected. It suggests that we are not so well versed in seventeenth century classics as we sometimes pretend to be.

A. C. Benson, who died before these revelations were made, described Shorthouse as a great mystery:

"He was a well-to-do manufacturer of vitriol who belonged to a cultivated suburban circle; he went off to his business in the morning and returned in the afternoon to a high tea. In the evening he wrote and read aloud. He had the fear of epileptic attacks for ever hanging over him, and was unfitted for society owing to a very painful and violent stammer. There was a certain grotesqueness communicated to the face by large, thin, flyaway whiskers of the kind that used to be known as 'weepers' or 'Dundrearies'. This was when he had just dawned upon the world as a celebrity." Some years after Benson saw him again; he was then paler and more worn of aspect. He had discarded his whiskers and had grown a pointed beard.

He was then a distinguished-looking man, whereas formerly he had only been an impressive-looking one. His stammer was not nearly so apparent, and he had far more assurance and dignity.

He went on to say: "But the mystery about him is this. How did this pious, conscientious man of business contrive to develop a style of quite extraordinary fineness, lucid, beauty-haunted, delicate and profound?"

Now does a distiller of vitriol become a distinguished man by fraud and robbery? I find the clue in the fact that Shorthouse was an epileptic. We know by clinical experience that epileptics may suffer from an extraordinary division of personality. Shorthouse making sulphuric acid in Birmingham and taking high tea was one man. Shorthouse in his study utterly immersed in the seventeenth century was quite another, and one Shorthouse did not know what the other Shorthouse did. The real life and the dream life were separate things. In so far as the dream life overflowed into the real life it made a bigger man of him—the complete opposite of Baron Corvo's fate.

The medical approach to dual personality is naturally from a somewhat different angle. To the inheritors of nineteenth century materialistic medicine it was not a welcome discovery that the psyche is a causal factor in disease. "It is the urgent problems of patients much more than the questions put by scientific workers which have given effective impetus to the newer developments in medical psychology and psychotherapy." As a result "to-day we have a psychology founded on experience and not upon articles of faith or the postulates of any philosophical system" (Jung). This involves us at the outset in a discussion of the unconscious. The Freudian attitude to the unconscious is perhaps apt to give it too dark and depressing an impression. Let us therefore start from a biological standpoint as Rivers would have done. Structurally we recognize numerous vestiges of earlier evolutionary phases in the human body, and the human psyche from our point of view is likewise a product of evolution which shows many archaic features. To continue the analogy, a child is born knowing how to breathe, but it has to learn to stand and to walk, though these speedily become almost as automatic and unconscious as breathing. Similarly consciousness did not exist from the beginning, and in every child has to be built up anew in the first few years of life. In itself turning away from instinct contributes to the building up of consciousness.

The development of the individual mind led to the formation of consecutive layers, each possessed of more reality-principle and self-control. But each individual started out equipped in these lower layers with earlier

racial tendencies which were held more or less in abeyance by the higher layers. I have compared this part of the brain to that deep cleft in the rocks near Garavan, where for 100,000 years men dwelt, each generation merely living on the top of the *débris* left by its predecessors. And now, as excavations have removed layer after layer, more and more primitive types of man are revealed. Just so, in disease and in dreams this control of the higher layers is lessened, and the older, more primitive methods of thought reassert themselves. One can see, on this view, how natural it is for the sick person to revert to the primitive belief in magic.

Rivers did not accept Freud's conception of a censorship, but regarded the fantastic and symbolic forms in which hysteria and dreams manifest themselves as a regression to a lower level which was natural to the infantile stages of human development, individual or collective. Thus we reach the higher levels of our nervous system on the stepping-stones not only of our dead selves, but of our long dead ancestors.

(To be continued.)

ANNUAL REPORTS ON CANCER

ANNUAL reports serve many purposes—they inform the subscribers how their money has been spent, they reveal the aims of different research centres, and most important of all, they insure that at least once a year the research worker must take stock and commit to writing his results and ideas.

The following notes are abstracted from four such annual reports, viz. the British Empire Cancer Campaign, the Medical Research Council, the National Radium Commission, and the Cancer Department of this Hospital. It is convenient to consider the various subjects dealt with in these reports under three main divisions—experimental research, clinical research, and administration.

In experimental research it seems probable that there will soon be substantial agreement between the two views that carcinogenic agents are "living" viruses or that they are non-living chemical compounds; thus, for example, the virus of tobacco-mosaic disease has been prepared in crystalline form. There are, of course, still many problems to be solved, and in a short article one can only illustrate the fascination of such work by one or two examples. The delicacy of the chemical work is shown by the fact that methylcholanthrene, the most potent cancer-producing compound known, can be rendered completely devoid of cancer-producing activity by the introduction of a single hydroxyl group

into its molecule. The approaching relations between viruses and chemical compounds may be illustrated in a fowl having both a chemically-induced (dibenzanthracene) tumour and a Rous sarcoma; the Rous virus can be recovered from the dibenzanthracene tumour, so that a cell-free filtrate of the dibenzanthracene tumour will produce a Rous sarcoma when injected into another fowl; yet a cell-implantation of the dibenzanthracene tumour produces a second dibenzanthracene tumour. When the Rous virus is injected into a fowl it can be found in all organs of the fowl; it can be extracted from the spleen, for example, and the extract produces the Rous sarcoma when injected into another fowl. Yet tumours arise only at the point of injection, and never in any other organ; perhaps this so far unexplained observation will prove to have a chemical basis.

On the radiation side, considerable progress has been made towards finding out how radiation affects the cell. For example, the importance of the functional activity of the cell in determining its response to irradiation is clearly shown by the following experiment: Pregnant rats, at full term, were irradiated so that the maternal and foetal intestines received identically the same dose; twenty-four hours later the maternal intestine showed gross injuries, while the foetal intestine was unaffected.

In clinical research there is a steady gathering of facts about the natural history of malignant tumours; for example, the geographical distribution of cancer is surprisingly different in different areas. The mortality from cancer of the skin is only half as great in London as in Lancashire, while that from cancer of the bladder or lung is nearly twice as great; the total mortality from all forms of cancer is identical in the two areas.

Selecting other examples at random, morbid anatomy has demonstrated the close correlation between the histology of a carcinoma of the rectum and its rate of growth and degree of extension; endocrinology is interested in the quantities of hormones produced by malignant tumours of glands, such as the adrenal or thyroid; biochemistry, by determining the serum phosphatase, may indicate the progress of healing of a bone sarcoma under radiation treatment.

Administration involves the day-to-day treatment of malignant disease—how to apply the means available to the best advantage. This is where statistics are essential, and the gathering of such statistics constitutes a large part of the work of any cancer organization. The clinical dresser probably does not appreciate how important are his ward-notes for this purpose, for from them both the stage of the disease and the details of treatment have to be evaluated.

The Radium Commission Report lays particular emphasis on two aspects of administration—the value of “team” work, where the physician, the surgeon and the radiotherapist plan in advance the treatment of the cancer patient, and the importance of the provision of more beds for cancer cases having radiation therapy. The difficulty of the bed question may be illustrated from our own Hospital statistics; over six hundred cancer patients are admitted annually, only two-fifths of whom are treated solely by surgery; yet in the X-Ray Therapy Department a further 240 cancer patients are treated annually as out-patients. The results of radiation therapy support the Radium Commission's plea that it should be available for every cancer patient likely to benefit from it; thus, to take only two examples, in inoperable carcinoma of the cervix uteri (Stages III and IV) the five-year “cure” rate is 25%, and in malignant growths of the nasopharynx (where surgery cannot, as a rule, even be attempted), 40%.

In conclusion, a few notes on the Cancer Department of this Hospital may be of interest. It attracts to the Hospital and administers several thousand pounds annually. While a large proportion of its income must necessarily be devoted to the treatment of patients, it does also support research work of more fundamental character. Prof. Hopwood's work on neutrons is one example, and Dr. Gray's demonstration that the spread of cancer by lymphatic permeation is a rare occurrence compared with that by embolism another. The introduction of the gastroscope into the Hospital was financed by the Cancer Department; Mr. Rodgers from the clinical, and Dr. Magnus from the pathological aspect, are making progress towards clarifying gastric pathology and securing the earlier diagnosis of gastric carcinoma. Drs. Robb-Smith and Bodley Scott are instituting some order into the chaos of the malignant lymphadenopathies, while Drs. Bland and Robinow are continuing their work on viruses and the cinematography of intracellular inclusions. Of other activities of the Department, ranging from super-voltage X-ray therapy to the microphotography of malignant tumours, there is little space to write; but enough has been indicated to show its many-sided impacts upon the treatment of patients, the teaching of students, and “pure” research.

RALPH PHILLIPS.

An Eye-Water.

Take House Snails, and beat them in their shells, and stratifie them with about an equal quantity of Juice of Celandine; draw off the Water in a cold or Pewter Still (such as is us'd for Rose-Water) and keep the Liquor that will come over close stopt for your use.



THE SEA URCHINS take first place as the Show of the Year. With the incomparable producership of Ronald Gibson to guide them, with a veteran of the calibre of Keith Vartan (those top notes showed signs of disuse atrophy) to help them and write them lyrics and with a cast bursting with talent they could hardly fail to succeed. But from their brave opening hornpipe to their rousing finale it was obvious that this was no ordinary success—it was a Triumph. Trevor Roberts took Roger Gilbert's place in the balcony and brought the house down in a way that Master must have endorsed. Alf Evans with four bewhiskered colleagues lamented the fate of Poor Little Willy with a pathos which the audience insisted on their repeating, and Keith Vartan, Tom Faulkner and the same Alf performed Savoyard feats of the tongue in recounting the sad story of Mrs. Jenkins's tumour. That the lighting and stage management were in the hands of James Cawthorne is recommendation enough. And through it all Ronald sat at the piano, playing as only he can play.

Ward Show ran *The Sea Urchins* pretty close for first place. Lumb is making his mark as a producer of note, and as a performer he has a confidence and resourcefulness which make him a model for aspiring stars. His monologues look like becoming an institution, though this year's was not, I thought, quite up to last year's standard. The whole show went like clockwork, and there was never a foot out of place in the chorus work. But with all its polish *Ward Show* was just a trifle disappointing. The opening chorus was excellent, and so were the tap-dancing of Lumb and Fletcher and the song of the Four Faded Bluebelts. But their topical switch had not quite the swing of the lamented *Sennapodians'* past masterpieces, and not even Lumb could persuade the audience that "Keep Fit" was a good enough tune in which to co-operate. Given better material this would have been a winner.

The Residents always provide good value, and this year, despite a certain lack of rehearsal, they were a real bargain. Clifford Newbold must have spent his recent spell in bed in hard thinking and on his return inspired his colleagues to superhuman effort. Jack shone as "Signalman Sam", but his Fish Train, with Tich Prothero as a van which seemed to belong on a narrow-gauge line and tended to get uncoupled, nearly

stole his thunder. The christening of Master Cumberbatch, etc., etc., was tremendous fun, and "Girls in Blue" was probably the Year's Best Topical Song. And it was good to see, and hear, Kenneth Latter back at a Ward Show piano. Altogether a masterly show.

The Bronchoptimists were ably compered by Carey, with a most becoming curl on his forehead. He had just the right touch of intimacy and insolence to take his audience with him and persuade them that he was there to entertain them, not just to fill in time. He sang a Ronald Frankau song which made them blush and like it. The show, thus pleasantly linked together, ran smoothly and, if unpretentiously, very amusingly along. To the tune of "Riding Down from Bangor" they sang a clever topical song with a welcome difference, since one didn't have to be in the know to appreciate it. Fagg showed considerable versatility as a player of wind instruments while pestering Sheen, who was commendably imperturbable, Burnett and Clunies-Ross tried out a rapid succession of old and new jokes on an unresponsive Neatby, while their potpourri of Gilbert and Sullivan, though somewhat disjointed, at least gave us the Year's Best "Nurse".

The Ballerinas opened with a delightful mockery of the ballet, but spoiled it by their singing being hardly up to the standard of their footwork; nor were their tunes well enough chosen to be welded into a continuous whole. But they made amends in the end, for the "Charladies' Ball" showed neither of these faults and went over well. Bad continuity was their major fault. White produced the most agonizing stammer in the first of two good railway sketches (the second should have been speeded up a bit), and Ellis dealt patiently with the eternal queries of House's horrible child. Liebmans sang very pleasantly to his own guitar, but his voice was not quite strong enough to fill a ward. The best feature of this show was the gusto with which it was presented.

The Unitwits had plenty of talent and made good use of it. Their opening chorus was full of fire and set a good pace, with which the rest of the show had just a little difficulty in keeping up. A show of this sort needed a less polite comper than Coupland. The outstanding turn was provided by Phillips and one of the Dunns. As a pair of policewomen they were superb in the best Music-Hall tradition. Messent and the Dunns (both of them this time) made a delightful trio of Little

Prairie Flowers and Reinold played expertly on the piano. That old favourite with the imaginary tower turned up again and was as great a success as ever. I particularly admired the ample lines of Richards's damsel. The historical song produced some delicious fooling—Phillips as Nelson reviewing the parade was a ten-second masterpiece—but the words could have been funnier. Throughout the show there was a streak of imbecility which was truly nitwittian, but also gave it a slightly slapdash air.

Wilson's Witches were an outside lot, and that may have accounted for the somewhat ponderous tempo of their show. Nevertheless, they sang as though they found it a tremendous joke and were bursting with good spirits. Macpherson, whether telling us stories or treading an elephantine measure as Billy Mulligan put everyone in a good humour, and we could even forgive Jeffries for taking up his cornet (or whatever it was) after a fallow four years (if my information is correct). Their illustration of the change in honeymoon manners, if slow at the start, was rounded off with a snap that gave no one time to be shocked and gave Gask a chance to shine as a modern bride, while Carroll won the title of the Year's Best Falsetto as the poor but honest heroine of their melodrama.

Les Folies Bleu Clair (*sic*), in the capable hands of Geoff Darke and with the advantage of Alan Thomson at the piano and three other competent musicians in their ranks, was the Year's Best Firm Show. "Wake Up and Live" was sparkling, and "We're Tough, Mighty Tough", with its rebellious companion, "Sister Don't Allow", vied in conception and execution with the Residents' song for the Topical Championship. "Only a Mill Girl"—more melodrama but this time without music—produced some good lines and was acted in the right spirit, though it was a little bit too long. And Darke must be congratulated on the way he succeeded in the task of persuading the audience to sing the sad song of the Lady and the Crocodile. Harold did his part of the compering with aplomb, and co-operated with Ward and Latham in giving an excellent musical number; that old favourite with the imaginary tower turned up again (yes, again) and was as great a success as ever. There was life and punch in this show from start to finish.

Geoff's Mutts were unlucky in losing two of their number over the weekend, but had I not known that some of their performance was given under this difficulty when I saw them on Boxing Day, I would still have thought them pretty good. They had the pleasant idea of using as their costume that of their Chief, and some of them achieved an almost libellous likeness of appearance and manner. Dixon ran the show vigorously, and sang and played expertly a very Gonella-esque number. But he was not so successful as Darke with the audience in "The Sheep Were in the Meadow", despite the assistance of his sheep and (on Christmas Day) cow. They had a first-rate pianist in Jarvis, and their opening and final numbers were on the right lines.

The Benedictines gave a show which was almost entirely musical and, well compered, ran through without any hesitation. But when I saw their first performance they all looked as though they were suffering from post-Christmas dyspepsia, and although a later visit

showed them to have improved somewhat in spirits they could still have done with a few more smiles. Their show itself was far from gloomy. They opened with a good short, snappy chorus, and their "Cleaning Windows" song was as good as any. Rees and Horton sang a Flanagan and Allen duet pleasantly, and Katz joined them in a fair, though lifeless, "No, No, A Thousand Times No!" I liked "Chinese Laundry Blues" and their topical sketch, but they failed to give their show a polished finale.

Riff Raff was the most colourfully dressed of the shows, but their performance failed to come up to the brightness of their appearance. The singing had a dreariness which was not suited to their songs, and was matched by a rather mournful expression on most of their faces. Their broadcasting sketch was amusing, as was the exasperating behaviour of an applicant for a pension, though this latter could well have been shorter. Nel showed himself an expert on the keyboard, whether attached to a piano or to an accordion, and Sullivan compered with quiet composure, though his jokes didn't always get home. "It's a Lie" was a bad choice as a song, being lacking in point and in wit. The whole show needed a strong infusion of life.

Porters' Potpourri was a very welcome revival of an old custom and more than justified the resurrection. Lewis (No. 3, I think; A. Lewis, anyway) wrote a lot of the material, produced the show, played a vigorous part in it and infused a lot of his own high spirits into the rest of his cast. They opened with a rollicking chorus, and then proceeded to unveil hitherto hidden talent among the men we are accustomed to see wheeling stretchers and working lifts. Rees produced a fine voice and Scottow played expertly on the mandoline. Seabrooke scored a big success as the unwilling victim of a ghoulishly-conceived Dental Department and again, ably supported by Wilson, in a sketch which, if a little too long, at least provided some uproarious farce. Perhaps the best turn was the Lift-Boys' Song with Lewis, Wilson, Covelly and Stokes (Albert to you). Stokes at last succumbed to the irrepressible Lewis and made his solo into an effective duet, and Hastings surprisingly produced a harmonium with which to collaborate with Scottow and Lewis in "A Monastery Garden". A thoroughly good show, Porters—may next year's be as good.

Looking back on the shows as a whole I feel that the one thing in particular in which there is room for improvement is Lighting. It is impossible, of course, for every show to carry round equipment as elaborate (and effective) as did, for example, *The Sea Urchins* or *The Bronchoptimists* this year. But even a single flood makes a great difference, especially as ward-show performers so often insist in standing right on top of the footlights. And the advantage of a quick black-out over the cumbrous closing of screens is one which producers should consider more deeply.

The Potpourri this year is wisely being given in the Cripplegate Theatre and should be well worth seeing. But if all the best turns are to be included the programme will be unconscionably long.

POST-OPERATIVE KETOSIS

THE changes in the body fluids induced by surgical operations under anaesthesia have been the subject of much attention in recent years. As biochemical methods were being applied more frequently in surgical practice, it was realized that disturbances in the water, sugar, ketone and nitrogen content as well as in the acid-base balance of the blood co-operate in producing a clinical picture to which the comprehensive term "post-operative humoral upset" has been aptly applied (Laduron, 1934; Letulle, 1935). Since several of these factors are usually acting together, the part played by each in the establishment of the condition is often difficult to determine.

Increased urinary acidity following operations under general anaesthesia was first noticed by Kast and Mester in 1891, and proved by Becker in 1894 to be due to the presence of ketones in the urine; he found Legal's test positive in 62% of urines after chloroform and ether narcosis, and in 1908 Cunningham obtained similar results after ethyl chloride. In addition, glycosuria was sometimes observed, and examination of the blood showed the presence of excess ketones and glucose, with a simultaneous accumulation of lactic acid (Fuss, 1934).

Mechanism of the ketosis.

The exact mode of production of the ketosis is still controversial. Undoubtedly, inanition, aided by faulty pre-operative preparation, is prominent among the causative factors. The patient often enters hospital in a bad nutritional state; with the traditional pre-operative régime of fasting and purgation, he not infrequently arrives on the operating table in a state of semi-starvation, while the usual post-operative treatment is not conducive to a rapid filling-up of his depleted carbohydrate reserves.

The anaesthetic itself constitutes a second cause. Roscher (1933) made the observation that both ether-chloroform narcosis and local anaesthesia provoke an exactly similar and often considerable decrease in the glycogen stored in a rabbit's liver, proportional to the time of anaesthesia and the quantity of anaesthetic administered. However, while narcosis is followed by hyperglycæmia, Roscher did not observe a similar rise in the blood sugar in the case of local anaesthesia. This fact "is suggestive of the carbohydrate metabolism during narcosis, being less intense than during local anaesthesia and far from able to keep pace with the glycogen mobilization".

Thus ketosis in the first instance seems to be provoked

by concurrent lack of carbohydrates and a disturbance in their metabolism, possibly with the less important aid of tissue trauma (Fuss); lastly, psychic influences, especially in children, may be instrumental in causing a metabolic upset.

Once ketosis has supervened, vomiting, if not already present for other reasons, is almost certain to occur, and by itself tends to increase the severity of the existing starvation and thus the ketosis. In this way a vicious circle is set up which if unbroken may become dangerous, and indeed fatal.

Incidence of ketonuria.

Laduron recorded ketonuria in 82% of 45, Roscher in 33 out of 36 patients under general anaesthesia. Ketones can usually be detected in the first sample of urine voided post-operatively, reach a maximum on the day following operation and then rapidly disappear. Ketosis and ketonuria are particularly likely to occur after operations on the liver and gall-bladder, and in cases of thyroidectomy for Graves' disease; in the first two, because of the frequently pre-existing liver damage, in the second owing to a severely deranged metabolism prior to the operation.

I have examined the incidence of ketonuria following an unselected series of 100 operations performed at St. Bartholomew's Hospital. All operations were done under general anaesthesia, and the first sample of urine passed after the operation was chosen for testing in every case.

The tests employed were Gerhardt's ferric chloride and Rothera's nitro-prusside tests, the latter being twenty times more sensitive for aceto-acetic acid than for acetone. Gerhardt's test was found unsatisfactory, as slight colour changes are difficult to appreciate, and the test is in many instances masked by the post-operative administration of salicylates; figures obtained by means of this test are therefore omitted.

The results given by Rothera's test were roughly subdivided into "Rothera +" and "Rothera ++". "Rothera +" includes all urines in which ketones were discovered. "Rothera ++" means that a deep permanganate colour appeared within ten seconds from the moment of adding the nitro-prusside solution. The test was regarded as negative if no definite change of colour had occurred after three minutes. Gerhardt's test was found positive in all cases with "Rothera ++" and a number with "Rothera +".

Operations included examples of most of those commonly performed, from minor operations and cystoscopies under a general anaesthetic to severe thoracic and abdominal cases.

Results.

TABLE I.

Number of operations	100
Rothera +	75
Rothera ++	26

TABLE II.

	G. + O.	G.O.E.	G.O. Chl.	G.O. + Bas. An.*	Spinal.
Total number	8	55	8	12	4
Rothera +	4	47 = 85%	3	9 = 75%	3
Rothera ++	0	18 = 33%	1	2 = 17%	2

* G.O. + Bas. An. includes avertin, evipan, nembutal and pentothal. Other anaesthetics used: Evipan only, 2 operations; avertin, cyclopropane, ether, pentothal only, 1 operation each. Anaesthetic not recorded, 7 operations.

From these figures it is seen that ketonuria was present in about the same percentage of urines as in other series, and that the type of anaesthetic used seemed to have little influence on its incidence, with the exception of simple gas and oxygen, which had an appreciably lower percentage.

Significance of ketosis and ketonuria.

The clinical picture of a severe post-operative ketosis is comparatively clear-cut. Symptoms usually start on the second day after operation: The patient is restless, the face flushed, the temperature elevated. There is a definite smell of acetone in the breath. The tongue is red and dry, and there may be diffuse abdominal pains (Mason, 1937). This condition, however, fortunately occurs but rarely.

The significance of slighter degrees of ketosis is much more difficult to assess. We are here dealing with predominantly subjective symptoms, which are, moreover, influenced by a large number of factors, such as the type of operation, the skill of surgeon, anaesthetist and the nurse in charge during the post-operative period, the drugs given in addition to the anaesthetic, and the psychological make-up of the patient.

Thus post-operative vomiting, for instance, is dependent on too many other factors besides ketosis to be necessarily of significance. In my series of 100 patients, 62 vomited post-operatively, while 38 did not. Rothera's test was positive in 82% of the first and fully 63% of the second group, and in general the vomiting was not more severe in the Rothera-positive patients, though exceptions occurred.

However, several writers (MacNab and Scarlett,

Perrin, 1934) assert that the general post-operative condition is strikingly better in ketone-free patients, and that they pass flatus earlier and vomit less than others with marked ketonuria. As children are particularly liable to metabolic upsets, they show the symptoms of ketosis more frequently than adults.

Treatment and Prophylaxis.

Glucose, given orally and parenterally, was early employed in the treatment of severe post-operative ketosis, with the later addition of insulin, soon after its discovery (Thalhimer, 1923; Fisher and Snell, 1924). The question of prophylaxis, however, is still unsettled. While it is generally agreed that pre-operative starvation is to be condemned, certain workers have advocated the pre-operative administration, in addition to the normal diet, of extra amounts of glucose, their idea being that it will be stored in the liver, and thus afford an additional protection.

According to Flint (1933), the diet must contain a daily total of at least 240 grm. of carbohydrates, and as this allows nothing for extra storage, more should be given. Thus MacNab and Scarlett administer 250-300 grm. of glucose in a quart of iced lemonade, on each of the two days preceding operation, and Perrin gives in addition 10 units of insulin two hours before operation, except in obviously young and healthy patients, undergoing operations of only moderate severity. At St. Bartholomew's Hospital the addition of smaller amounts of glucose to the normal diet has been tried, with the results recorded below.

Glucose was given pre-operatively in two forms:

(1) Pure glucose: Of this 4 drms. were given orally on the day of operation.

(2) The patient was given barley-sugar containing 80% glucose. Inquiry showed that the maximum taken by one patient was about twelve lumps, or 2.5 oz. It is reasonable to assume that few patients took more than a total of 50 grm. pure extra glucose, while many took less. Insulin was given in no case in the present series.

The question of glucose therapy was considered in 72 patients:

TABLE III.

	No. of patients.	Rothera +.	Rothera ++.
Extra glucose	46	34 = 74%	12 = 26%
No extra	26	22 = 85%	6 = 23%
Total	72	56 = 78%	18 = 25%

TABLE IV.—*Examples.*

Operation.	Glucose.	No. of patients.	Rothera +.	Rothera ++.
Hernia	Extra	8	8	6
	No extra	4	4	2
	Total	12	12	8
Partial thyroidectomy	Extra	4	3	1
	No extra	3	2	0
	Total	7	5	1
Local excision of breast	Extra	3	2	0
	No extra	3	3	1
	Total	6	5	1
Genito-urinary operations, excluding cystoscopy	Extra	7	5	1
	No extra	2	2	0
	Total	9	7	1

TABLE V.—*Vomiting.*

Glucose.	No. of patients.	Patients vomiting.
Extra	46	28 = 61%
No extra	26	20 = 77%

No difference was noticed between the two groups with regard to the severity of the vomiting.

Thus the pre-operative administration of small amounts of extra glucose was not found to exert an appreciable influence on the incidence of post-operative ketonuria; further, as the occurrence of post-operative vomiting depends on a number of factors besides the presence of ketosis, the slightly lower incidence of vomiting under glucose administration cannot be considered significant.

Summary.

(1) Ketonæmia and ketonuria occur after a large number of operations under general and local anæsthesia, particularly after operations on the liver and gall-bladder, on patients with Graves' disease and in children.

(2) Ketosis is caused by the anæsthetic itself and is aggravated by the patient being starved; trauma and psychological influences are further contributory factors.

(3) Among the effects on the patient of a severe ketosis are fever, vomiting and abdominal pains; these must be combated by the administration of glucose and insulin.

(4) Slighter degrees of ketonæmia produce less well-marked symptoms.

(5) At St. Bartholomew's Hospital the pre-operative

use of small quantities of extra glucose was found to have no appreciable influence on the incidence of post-operative ketonuria and vomiting.

(6) The pre-operative exhibition of larger amounts of glucose, with or without insulin, is reported by some authors to benefit the general post-operative condition, and is now under trial at this Hospital.

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F. W. GUNZ.

OBITUARY

FRANCIS WILLIAM O'CONNOR, 1884-1937.

The science of tropical medicine lost a distinguished exponent when on October 2nd Prof. Francis W. O'Connor died at the Columbia Presbyterian Medical Centre in New York City, following an operation for intestinal obstruction. For some time previously he had been suffering from heart disease.

Born at Limerick in the Irish Free State in 1884, O'Connor entered St. Bartholomew's in 1901, and qualified M.R.C.S., L.R.C.P. six years later. Very early in his career he decided to make tropical diseases his speciality. After house-appointments at the Seamen's Hospital, Greenwich, and at the Hospital for Tropical Diseases, he served for three years, as medical officer to the foreign community on the island of Formosa. In 1913 he returned to England to take the Cambridge D.T.M.&H., and was appointed Demonstrator in Medical Entomology at the London School of Tropical Medicine. This same year he acted as honorary secretary of the Section of Tropical Medicine at the annual meeting of the British Medical Association. His academic life was interrupted by the war, when he joined the R.A.M.C. to serve in France, Egypt and Salonika.

In 1919, as Wandsworth Scholar of the London School of Tropical Medicine, he travelled in the Samoan, Tokelau and Ellice Islands in the Pacific. Here began his researches on filariasis, a disease which was to fascinate, intrigue and perplex his eager and critical mind until his death. His contributions to its ætiology and treatment were numerous, exhaustive and exceedingly distinguished, and many of its problems he worked out experimentally on himself, at times seriously jeopardizing his health.

In 1924 O'Connor went to New York as Assistant Director of the Division of Medical Education, Rockefeller Foundation, and, after a year spent as Visiting Lecturer in Tropical Diseases at the Puerto Rico School of Tropical Medicine, he became in 1928 Director of the Department of Tropical Medicine and Associate Professor of Medicine at Columbia University.

Small in stature, reserved and moody, though often enthusiastic and genial, disliking and avoiding social life and scientific meetings, O'Connor was a tremendous worker and a voracious reader of scientific literature, history, biography and detective stories. The latter he read not so much for relaxation as for mental exercise, preferring the methods and exploits of English detectives to those of their American colleagues. Keenly interested in the history of tropical medicine, particularly of filariasis, he spared no trouble in going to the original sources. The old books he loved, and the old masters he knew intimately.

Living quite simply in the medical students' dormitory close to his work, much of his research was done over week-ends in a laboratory at his farm in the country.

WALTER R. BETT.

CEREBRAL VASCULAR ACCIDENTS

THE Abernethian Society met on December 2nd to hear an address from Dr. C. M. Hinds Howell on "Cerebral Vascular Accidents". There were present Prof. Ross, Dr. Chandler, Dr. Cullinan, Dr. Denny-Brown, 80 student members of the Society, Miss Dey, and 80 members of the nursing staff. Mr. Harmer was in the chair, and reminded the Society that it was having the privilege of listening to what might be regarded as a substitute for Dr. Hinds Howell's farewell lecture, which illness—from which he had obviously and happily recovered—had prevented him from delivering at the proper time. He went on to tell a tale of his return home from the Students' Union Ball in which he fell into conversation with a horse and was subsequently disbelieved by his dog. He felt that this strange adventure might perhaps be explained by Dr. Hinds Howell on the basis of a cerebral vascular accident.

Dr. Hinds Howell confessed himself amazed by what he had just heard. He could not explain Mr. Harmer's experience as a manifestation of any known vascular accident. He could only suppose that he had looked on the wine when it was red and that there had been bubbles in his blood.

He went on to say that the title of his talk had as little connection with what he intended to say as the title of a surrealist picture had with what it in fact depicted. He intended merely to describe three pathological intracranial conditions, only one of which might be called a traumatic accident. The first of these was—

Subdural Hæmorrhage.

This condition might be caused by severe injury to the head, but might also result from trivial injury, especially in an old person if the force were applied to the head in the antero-posterior diameter. He reminded his audience of the anatomy of the superior longitudinal sinus which, though itself fixed to the skull, yet receives unsupported lateral contributory veins. A longitudinal blow to the head would cause a movement of the brain, and thus of the contributory veins, relatively to the fixed sinus. The junction of these veins to the sinus would be likely to be torn, and venous hæmorrhage would result, especially in old people whose vessels had lost some of their youthful elasticity. It had been said that in only 50% of cases of subdural hæmorrhage had the responsible injury been sufficient to cause loss of consciousness.

The characteristic clinical feature of chronic subdural hæmorrhage was the prolonged "latent interval" which elapsed between the injury and the development of signs of increased intracranial pressure. This latent interval was to be contrasted with the much briefer "lucid interval" in cases of concussion. The latent interval of subdural hæmorrhage might last for months: indeed one case of an interval of two years was on record. The latency was due to the slowness of the bleeding. That was certain, but the mechanism of this slow bleeding was less certain. A membrane appeared to develop round the original extravasated blood; this membrane became vascularized, and slow oozing of blood from these new-formed vessels seemed to occur.

He would give two examples to paint a clinical picture of the condition:

CASE 1.—This concerned an elderly man of 65 (who was thus truly elderly compared to the patient referred to by a candidate in a recent examination as an elderly man of 35!), a bus, an urchin and a bicycle. The man was hurrying after the bus when the urchin on the bicycle knocked him down. He picked himself up slightly dazed, and was taken to the Royal Northern Hospital. After a few days he was discharged, but continued to have headaches, to be irritable and to be not quite "on the spot". After three weeks of gradual deterioration he developed a slight left hemiplegia, and Dr. Hinds Howell was called in. He found bilateral papilloedema. He went to Prof. Ross for help, who agreed to operate, did so, found a hæmatoma and removed it. But all did not go well. The next evening the patient was comatose and Dr. Hinds Howell suggested to Prof. Ross that he had left a vessel untied. With this opinion Prof. Ross would not agree; nevertheless he reopened the wound, only to find all well, except that the brain had not expanded to fill the cavity formerly occupied by the hæmatoma. The next morning the patient died, and *post-mortem* was found to have an even larger hæmatoma than that which had been removed, on the other side.

This case illustrated the fact, which was not known then, that 10% of these cases show bilateral hæmorrhage, though this was the only example that Dr. Hinds Howell had himself seen.

CASE 2.—This concerned a young man on a motor-bicycle and his fiancée riding pillion. (At this juncture Dr. Hinds Howell broke off to beseech those members of the nursing staff who were present never to ride pillion. This practice he considered to be dangerous from every point of view.) These two met with a serious accident one August in which the girl was killed and the man was rendered unconscious, was badly

damaged and lost an arm. In time he recovered and returned to work at the counter of his father's tobacconist's shop; he still suffered, however, from very severe headaches, which got steadily worse in spite of the sympathy of out-patient dressers on his frequent visits to the Surgery. Eventually, in November, Dr. Hinds Howell was asked to see him and he was admitted. In this Hospital, under careful treatment, he improved so rapidly that he was allowed, when the time arrived, to attend the Ward's customary Christmas festivities. On Boxing day he was frightful. Since there were others who had suffered as he had, his condition was attributed to the beano. But on January 1st he was found to have papilloedema and a diagnosis of subdural hæmatoma was made. As there were no localizing signs, a ventricular evacuation was performed by Prof. Ross. One side was found to be compressed; an operation for the removal of a hæmatoma was done on that side, and the patient recovered completely.

These two cases showed that subdural hæmorrhage might occur in youth as well as in age; indeed cases had been recorded in infants. The headache and irritability during the latent interval were almost indistinguishable from "traumatic neurasthenia", which was therefore a term to be used circumspectly. The first case showed the difficulty in the interpretation of pyramidal signs. Here the larger hæmatoma probably drove the brain across to the opposite side and against the tentorium, and thus caused homolateral hemiplegia. The only certain localizing sign was a dilated pupil. If this appeared in one eye the hæmatoma would certainly be found on the same side. The only treatment was operative.

He then showed some slides demonstrating the naked-eye appearance of the hæmatoma, the depression it caused in the brain, and the microscopic appearance of the false membrane that was formed and of the vessels within it, which were probably responsible for the slow oozing of blood during the latent interval.

The second condition about which he intended to speak was—

Subarachnoid Hæmorrhage.

This might happen in any hæmorrhagic condition, or in hyperpiesis, but was especially liable to arise from an aneurysm. Such an aneurysm might occur anywhere, but was most frequently found on the circle of Willis, and was most commonly due to a congenital defect, when it was called a "berry aneurysm"; but it might also be syphilitic or endocarditic in origin. If the aneurysm ruptured, death invariably followed: if it just leaked, the patient might well live to leak

another day. He had known one patient who leaked five times.

A proper leak from such an aneurysm resulted in a characteristic ritual. The patient would cry, "Oh my head!" and fall unconscious to the floor. If this occurred, the diagnosis could be made on the spot, but the event was not ordinarily seen and the patient would be found in coma. He would be likely to have albumen in the urine and a diagnosis of uræmia might easily be made. There might also be sugar in the urine, when the coma might be mistaken for that of diabetes. He remembered one patient who had been brought to the hospital in coma; his house physician had found sugar in the urine and diagnosed diabetic coma, but in spite of the very best treatment the patient remained unconscious. The house physician came to him to ask what he should do and mentioned that the patient's neck "seemed rather stiff". He bet him half-a-crown that if he did a lumbar puncture he would find a blood-stained cerebro-spinal fluid. It was an easy half-crown. The blood-stained fluid was found all right.

Sometimes there might be no loss of consciousness, but merely severe pain. A hemiplegia might also result. The first case he remembered was that of a telephone operator, aged 19, who while telephoning said, "Oh my head!" and collapsed. When he saw her she had papilloedema and a hemiplegia and he diagnosed her as a case of cerebral tumour. A decompression over the motor cortex was done, at which he with difficulty restrained the surgeon from removing bits of the brain in his ardour. There was consequently a complete recovery within four weeks and there was no residual bulging of brain through the cranial wound. The patient was about to leave hospital when she suddenly relapsed into unconsciousness, the brain began to bulge out, and she died. *Post-mortem* an aneurysm which had leaked twice was found.

The youngest case he remembered was a boy, aged 9, in whom a diagnosis of cerebro-spinal meningitis was made at first. This patient recovered and was now an officer at sea. He did not know if he had leaked again.

An occasional symptom was a cranial nerve palsy. One case in Annie Zunz Ward had a complete third nerve palsy but recovered and was now a cook for a colonel on Shooters Hill, which showed how good she must be. She still had some residual third paresis, however.

He expected that many of his audience had suffered from migraine—he had done so himself—for it occurred mostly in intelligent people. Ophthalmoplegic migraine had been shown to be associated with aneurysm of the circle of Willis. He had at the moment a young

patient in the National Hospital who had ophthalmoplegic migraine with some residual third paresis. This boy's clinical clerk reported that his symptoms were ameliorated by compression of the carotids, which might cause such an aneurysm to decrease in size.

The diagnosis of subarachnoid leakage was not difficult with its characteristic symptoms of headache, convulsions, delirium and coma followed by retinal hæmorrhages, papilloedema, albuminuria, glycosuria and pyrexia, and above all with the blood-stained cerebro-spinal fluid which should always be examined. Localization, however, was often difficult; calcification in the walls of an aneurysm might be seen in X-rays, when it gave rise to an appearance known as Albl's rings. Aneurysms might also be demonstrated by thorotrast injection, though this method was not without its objections. He instanced a patient of his who, during an injection of thorotrast, suddenly cried out, "Oh my eye!" and became blind in one eye. Next day the eye appeared bright green by ophthalmoscopy. Six weeks later sight returned. He would leave his audience to reason out for themselves an explanation for this mystery. He emphasized the fact that only a carotid cavernous aneurysm gave an audible bruit, and that this was more easily heard by the patient himself than by the doctor. The commonest causes of intracranial bruits were angiomas or vascular meningiomas.

He then showed some X-ray photographs of Albl's rings, of thorotrast demonstrations of aneurysms and a meningioma, and of an angioma with partial calcification.

The last subject with which he proposed to deal was—

Hypertension.

There was no time for him to list all the cerebral symptoms of this condition and of the accompanying arterio-sclerosis. The patients were likely to suffer from headaches, irritability, giddiness and loss of memory. They might be quite young and very troublesome to treat. The blood-pressure might reach extraordinary heights. He remembered a Frenchman, chief chef at the Savoy, who suffered from severe headaches and giddiness. He had a blood-pressure of 315, and there were hæmorrhages all round his discs. He asked him, "Do yourself well?" He answered "Yes". "Champagne?" "Yes." "I'm afraid it will have to stop." The man paused and asked, "Look here, doctor, will I get well if I give it all up?" "No." "Very well, I won't." "You'll bust if you don't." "Very well, I will bust!" And bust he did very soon. He was a gallant young man. These patients may have transient paralyses, but if they last more

than a day they are likely to be permanent. These fits were probably due to spasm, but were a grave omen. One day the patient evincing them would develop a hæmorrhage or a thrombosis. The blood-pressure might be very variable. One patient of McAlpine's had a normal pressure of 205. One afternoon it rose to 320 and the patient had a fit; in the evening it was down again to 230, and the patient was well again. The fact that they had fits, severe headache, vomiting, papilloedema and even coma might lead to a diagnosis of cerebral tumour. But patients with a cerebral tumour did not usually have hyperpiesis or retinal hæmorrhages.

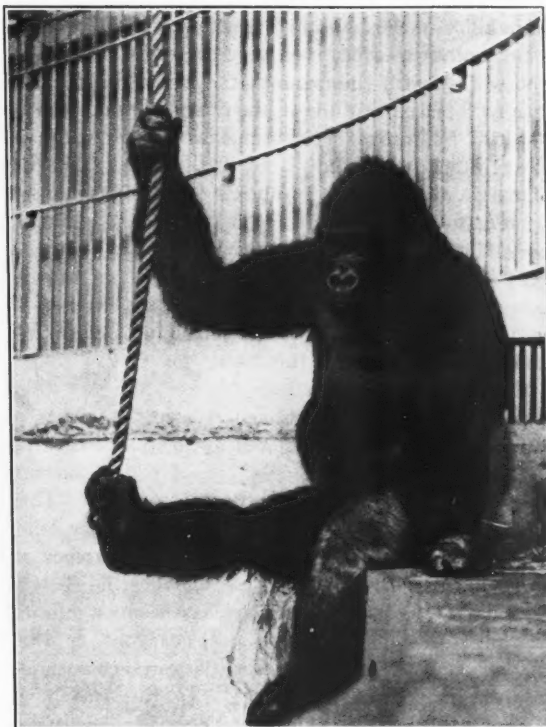
Finally Dr. Hinds Howell showed some slides to illustrate the local degeneration of the cerebrum which resulted from hypertension and gave it a moth-eaten appearance, and of the characteristic changes seen in the fundus.

Dr. Chandler, in proposing a vote of thanks to Dr. Hinds Howell, compared his enjoyment of the lecture to that which he had felt when he first read Trousseau on apoplexy. It was the joy of listening at leisure to the exposition of a master. He spoke further of his deep appreciation of Dr. Hinds Howell's kindness and ability, from which it had been his good fortune to benefit daily during many years of happy co-operation. The vote of thanks was seconded by Mr. Terry, who referred to a historical subdural hæmorrhage, that suffered by Louis Pasteur, from which he recovered to do some of the greatest of his work.

Dr. Hinds Howell in reply said that he was much touched by what had been said by Dr. Chandler, than whom he could imagine no more loyal colleague.

they deserve, and the road is now left open for an unbiased investigation of primate behaviour.

The first essential when investigating the behaviour of animals is to adopt an attitude that may be described as "behaviouristic". This does not mean a blind acceptance of the tenets of Dr. Watson's Behaviourist School of Psychology, but the adoption of the view that the emotions and intellectual abilities of animals are



MONKEY POWER.

[By kind permission of the Zoological Society.]

MEN, MONKEYS AND SCIENTISTS

MEN and apes have many vices in common. Vice is such a distinguishing characteristic of the human species, that it is easy to understand the tendency of the old-time naturalists to extend this similarity from moral to intellectual spheres. In the formidable array of anecdotes so uncritically accepted by former generations, we find apes accredited with a cunning that is almost oriental in its subtlety. Even in the sphere of mathematics their performances, if not Newtonian, would certainly have done credit to a board school. With the growth of scientific consciousness, however, such tales have fallen into the discredit

capable of being estimated quantitatively by physical methods. Thus the old system of anecdote and personal interpretation, or misinterpretation, is replaced by adequately controlled experimental situations in which the personal element is—to as great an extent as possible—excluded. The necessity for excluding personal contacts with the animals is well shown by the case of "Clever Hans", the counting horse, who could, with the utmost ease and rapidity, derive the square roots of three-figure numbers. This mathematical prodigy was eventually explained on the basis of clues given to the horse by small movements of his master's head.

In the simplest quantitative method, a direct estimation is made of the amount of work an animal will

do, in order to obtain any one of a series of desired objects. Thus a male baboon may be made to work in order to obtain a female in heat. When a value has been obtained for the maximum amount of work that he will perform to get his mate, the female is replaced by some other desirable object, such as, shall we say, a banana, and the procedure repeated. When a second value has been obtained for the work equivalent of the banana, we are in a position to evaluate the desirability of the female in "banana power" or, alternatively, the desirability of a banana in "female power".

In another method, used so successfully by Kohler, who worked with chimpanzees, the animal is presented with food placed just out of his reach, but which can be obtained by means of instruments such as sticks or boxes, which have been placed in the cage. Thus the chimp may have to pile two boxes on top of each other in order to get his reward. This method is admirable for studying the ability of apes and monkeys to solve comparatively intricate problems. Recently interesting comparisons have been made between the abilities of chimpanzees and idiots to solve similar problems. We shall, however, return to this later.

The most fecund method of research has been developed from the conditioned reflex experiments of Pavlov. The animal is required to make a differentiation between two boxes, only one of which contains food. The boxes are similar save in one respect. Thus one box may sport a red circle on its lid and the other may have a white circle. The monkey is trained to expect to find food only in the box on whose lid there is a red circle. When this reaction has been established the circles are replaced by squares, hexagons, or what you will, the only constant factor that can be associated with the food being "redness". In this way it is possible to investigate the animal's sense perceptions, his ability to discriminate between geometrical forms, and his capacity for appreciating abstract relations and qualities, such as triangularity, brightness, etc.

We have discussed the methods; now we will evaluate the results.

Firstly, the special senses. In vision, monkeys and apes have poorer acuity than human beings, but they are able to discriminate between degrees of brightness which cannot be appreciated by the human eye. Their capacity for seeing colours is equal to that of men. On the interpretative side there is slight evidence that they can recognize photographic reproductions of objects and creatures that have emotional significance to them, such as food or snakes. This is remarkable in view of the fact that anthropologists have described many cases of savages who are unable to interpret even the most straightforward of photographs.

The ability of apes and monkeys to use tools is limited, but by no means negligible. Thus Sultan, the most intelligent of Kohler's chimpanzees, was able to teach himself to fit together two jointed pieces of bamboo in order to reach a piece of food that was too far away to be obtained by using either stick alone. In the architectural sphere the ability of chimpanzees to build pyramids of boxes is limited by a total disregard for the laws of gravitation. This is not surprising when it is remembered that these animals have no constant relation to the earth's surface, and are as likely to be hanging head down from a branch as to be standing erect. Such conditions are not likely to help them to discover the laws that they so flagrantly disobey.

The performances of idiots and chimpanzees in building up boxes in order to obtain a reward have been compared. It was found that an idiot with a mental age of two years was rather slower than the ape in solving the problem, but, after the first success, perfected the solution with much greater rapidity.

The memory of apes for the relative position of objects is much more exact than that of human beings. However their capacity to memorize the exact shape and character of things is disappointingly low.

Both monkeys and apes have a great ability to distinguish between similar geometrical forms, but there is much doubt whether they can appreciate such concepts as those of "triangularity", etc. In this they are much inferior to a five-year-old infant, whose superiority lies largely in his ability to verbalize the problem presented to him.

Many attempts have been made to teach monkeys to count, and varied and ingenious methods have been used. The writer, after a year's work on this subject, has no hesitation in saying that both monkeys and chimpanzees are entirely lacking in this faculty. Opinion, however, is still divided, for it is much harder to prove inability than to prove ability. It may be that a supercerebrated ape will one day be found that is capable of distinguishing 1 from 2, but the possibility is remote.

In this short account it has been shown that the mentality of sub-human primates, while showing some similarity to that of humans, is of a very different quality. Man's superiority cannot be entirely explained by his capacity to solve his problems by verbalizing them. There is a much wider gap than this between the two mentalities, a gap which is bridged by the abnormal of the human species—the congenital idiots. Thus in the end it is the anatomical differences that determine the psychological disparities.

J. B. DOUGLAS.

CORRESPONDENCE

CONDITIONS OF NURSING.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—With reference to your article on Nursing Conditions, I should like to say that the Nurses in this Hospital are fortunate in having very little at which to grumble. Our Nurses' Home is comfortable and convenient, our food, if not always quite up to standard, is on the whole, perfectly good (though sometimes badly cooked), and very much better now than it was three years ago. We are better paid than many of our friends in the provinces, and our off duty is, to my mind, sufficient.

If we must have an eight-hour day, could it not be very well managed by giving the nurses four hours off duty every day, with an hour for dinner and half an hour for tea, which meals must both be taken in the dining-room? The nurses at present have four hours off duty on Sundays, and I do not see why this should not be workable with one or two extra nurses per ward, instead of a whole shift. The three-shift system, in my opinion, would not be very pleasant for the patients; changing over morning and evening seems enough to them.

Night nurses, working say from 8 p.m. to 7 a.m., with an hour off the ward in the middle of the night for their meal, would be working at the rate of eight hours a day if they then had ten nights on and four off every fortnight, instead of twelve and three as at present. This again would not necessitate so many extra nurses.

With regard to the teaching, I think that ward rounds as you suggest for the nurses is not a very good idea, for we are not learning to be doctors. Our job is not to diagnose and prescribe, but to nurse, observe and carry out instructions.

I do think, however, that the Sister of each ward should have an hour or so every week during which she might teach the nursing points regarding the patients in the ward. Would this not be a way of preventing failures in the Practical State Examinations?

When you said in your article that the probationers were comparatively ill-read, we trust that this was meant to refer to medical knowledge, for the general education of the average nurse is quite equal to that of the average student.

It might interest you to know that a nurse in Surgery was asked by a student what "hamoptysis" was. Another student is reported to have stated that P.R.N. means Per Rectum Nocte. Excellent medical knowledge!

I am,
Yours, etc.,

BLUE BELT.

The Nurses' Home,
St. Bartholomew's Hospital, E.C. 1.
December 20th, 1937.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—Your editorial concerning nursing conditions voices an interest which we must all feel. It is undoubtedly true that just as the education of medical students can be improved, so also can the training of student nurses. But in our Hospital, where the standard of nursing is so high, any change must be introduced with caution. I am prompted to write by my experience of nursing in the United States. There the student nurse takes very little part in the routine care of patients, and even after graduation much of her time is spent in writing full nursing notes on each patient. Orderlies often share the actual nursing. Such a method of training—in which lectures figure largely—may, but by no means always does, increase the student's knowledge on theoretical matters, but in my opinion it may also lead to poor nursing.

The spirit which exists in our own wards and theatres is, in my experience, an uncommon one. Also perhaps the surest way of acquiring medical knowledge is by observing patients. The necessary

anatomical and physiological background can be rapidly acquired in the course of such observation—at least in so far as student nurses are concerned.

Yours faithfully,
J. E. A. O'CONNELL.

St. Bartholomew's Hospital,
E.C. 1;
December 14th, 1937.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—We have read with appreciation your article on the conditions of nursing, and we also should like to voice an opinion.

The art of our profession is to "care for and cherish" the sick, and this art is only learnt by daily contact with the patient, though necessarily assisted by theory learnt in the lecture-room.

The syllabus of our lectures is comprehensive, and we suggest that if a staff nurse is questioned, not an "ill-read probationer", about the condition of a patient, her knowledge, though not aspiring to the detail required of the medical student, will be found adequate for the humane and intelligent execution of her duties.

Yours faithfully,
E. M. K. PETTER.
D. M. WITHYCOMBE.

The Nurses' Home,
St. Bartholomew's Hospital,
E.C. 1;
December 14th, 1937.

To the Editor 'St. Bartholomew's Hospital Journal'.

SIR,—I think that many people must have been glad that you chose nursing conditions for the subject of your last editorial. The large share which nursing skill contributes to the recovery of a patient is obvious to the merest beginner in medicine. This, and the fact that good team-work is now essential to successful medical practice, is sufficient reason for doctors and nurses to be concerned at the present conditions of nursing.

As you said, in our Hospital those conditions are relatively good. But it is not to our credit that it has needed the indignation of the Press to make us realize that those on whom we place the greatest reliance work, on a national average, 70 to 80 hours per week, are fed abominably, receive less wages than a porter, and are treated like school fags when on duty, and the cads of the Sixth when off.

There is the view that, while training, nurses are "in statu pupillari", and therefore should not lay claim to the rights of an adult wage-earner. There appear to be two errors in this reasoning. First, as was pointed out in the Report (1932) of the *Lancet* Inquiry on Nursing, a nurse herself pays for her training by doing work more skilled than that for which she is paid. The trained nurse, however, still receives a wholly inadequate wage. Secondly, there is no reason why a woman who is entrusted with the highest duties and responsibilities when in hospital, should be regarded as irresponsible when outside. On the contrary, both the nature of her work, and the strain which it entails, make it necessary that she should be allowed as much free time as possible. For herself, and for the good of her work, she requires the opportunity to develop wide interests. Moreover, only a policy based on this point of view will reduce the present shortage of nurses. We may be thankful that one organization, the Association of Nurses, has adopted such a policy.

What has been accomplished elsewhere can be done here. Dr. Noel E. Waterfield, F.R.C.S., who recently visited Russia as representative of the B.M.A., said on his return:

"Nurses in Russia have conditions which should point the way to reform in this country. They work a six-hour day, live outside the hospital, and are free to live in any manner they like. If they are married and become pregnant, they are given the usual holiday

before and after pregnancy, and then return to duty" (*Medicine, To-day and To-morrow*, December, 1937). We may also note that in New Zealand the three-shift day is working with success.

Yours faithfully,
LIONEL GRUNBAUM.
E.C. 1;
St. Bartholomew's Hospital,

December 15th, 1937.

MEDICAL STUDENT CONFERENCE.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—We are asking you to have the kindness to print the following in your Journal.

In July, 1937, a conference of medical students was held at Liverpool as a result of which a Medical Sub-section of the National Union of Students was formed. The object of this new section is to give the medical students of Great Britain and Ireland a central bureau comparable to those already existing on the Continent. The activities of this section will include the extension of inter-school visits, arrangements for medical tours abroad and discussion on the medical curriculum.

It was greatly to be regretted that at the conference of the thirteen London medical schools, only three were represented, namely—University College Hospital, Middlesex and the Royal Free Hospital. It is felt that inadequate publicity has been given to the newly formed sub-section, whose activities cannot fail to be of interest to medical students. Many students are ignorant of, or imperfectly acquainted with, the formation of the central bureau, and in January a meeting will be held to which all students are welcome and at which free discussion may take place. The Secretaries of the Union and Medical Society have been communicated with in all the London medical schools, and details of the January meeting may be obtained from them.

All further inquiries are welcome, and should be addressed to either of the writers of this letter.

Yours very truly,
L. L. WHYTEHEAD,
Medical School,
Middlesex Hospital.
JEAN E. GRANT,
Students' Quarters,
Royal Free Hospital.

December 5th, 1937.

THESE ARTISTS.

To the Editor, 'St. Bartholomew's Hospital Journal'.

SIR,—I have read with much interest the letter from "G. F." in the November issue of the JOURNAL. Who he may be I do not know, but if, as seems probable, the initials at the bottom of the review of the Art Exhibition at the Royal College of Surgeons are also his, then presumably he is a member of the Socialist Society; (for does he not lament there the absence of anything "smacking of any of the more modern art movements", and are not fascists notoriously radical as regards Art?). Be this as it may, it need not prevent me from vigorously supporting his cause. I would suggest, however, that such an exhibition should also include etchings, woodcuts and photographs, or indeed any form of pictorial or plastic art.

Yours faithfully,
MICHAEL HARMER.

December 7th, 1937.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—One wonders why the notorious Trotskyist who cowers behind the *nom de plume* of "Michael Harmer" does not come out into the open and sign his real name? He is probably well aware that he would get short shrift from the Comintern if he dared do so.

As for the identity of "G. F.", he knows well enough that since my withdrawal from the Council (to make way for younger men) I have been spending my retirement on the South Coast.

Though not a member of the Socialist Society, I have been its greatest benefactor, in the same sense that Herr Hitler has done so much for Zionism. But revolution in Art and Politics are different things. It is, in fact, impossible to be a traditionalist in the former without being a revolutionary also; and the so-called academic or naturalistic painters are in reality pitiable offshoots from the main body of art, who cling to a completely abnormal fashion which had a passing vogue in the last century when the Industrial Revolution (a revolution of the evil, political variety) had unfortunately put money into the pockets of Manchester mill-owners. Naturalism has no more to do with Art than the Albigensian Heresy.

I remain, good Sir,
Yours consistently,
G. F.

December 14th, 1937.

SPORTS NEWS

IT will surprise many citizens of this place to learn that a distinguished American scribe, who must be well known to one and all, was present at the Rugger Dinner, in the guise of Kenneth Rankin, of the *Daily Telegraph*. With his gracious permission we are privileged to publish his letter to his host:

"One night I am sitting at Gatti's, which is a swell joint which I do not often penetrate and how I am there is because an enterprising guy named Goodtime Alfie, who is well known to one and all as an organiser of such and several other matters, slips me a ducklet for a celebration which is being given on account of some citizens have bought a new campus and this has just been granted the sesame by a nice doll who is a well-known citizen of that place, and before she is shewn around she shot a nice line in words, at that.

"Well I am naturally pleased to be at this gathering because to go to a place such as Gatti's and walk up the stairs and shoot my derby to the vestry-man without the janitor gripping me by the sitdowns and holding me for the gendarmes to give me a stroke on the noggin and drive me away in the postchaise is a very rare occasion for me indeed. And furthermore I wish to say that many of those present do not appear to wonder why the doors have been left open but rap to me and give me the big hullo and ask me whether it shall be an old-fashioned or a Tom and Jerry or just straight or what?

"So here I am sitting at the table with the waiters serving me with this and that and even making play not to notice that my

dinner suit would make theirs look like the White House, and who do I find I am with but such prominent guys as Goodtime Alfie himself, and Irish Danny and Wee Willy Winky and Gadney the play-judge and Slek Jim Cranlee the newspaper scribe and many other similar personages who are well known to one and all so naturally what do I do but puff my chest out big and a button from my Tuxedo flies off like a slug out of a John Roscoe and a guy comes across and states that he will recommend that they give Clarke the stand-down and use me in the Coventry second row instead, which naturally pleases me more than somewhat."

RUGBY FOOTBALL

The Hospital XV is still improving. The forwards particularly, are doing well; the back division has not yet settled itself, but Hearn and Candler have again established a valuable understanding at half-back. The team has finished the first half of the season with a magnificent victory over Cross Keys, who brought two internationals and seven county players for their first visit to London.

On an extremely evil day, bad from the point of view of player and spectator alike, Bart's 'A' XV met the **Harlequins 'A' XV** at Chislehurst. Should your correspondent's view of the game appear to be clouded by unreasoning dislike, it must be borne in mind that he had allowed himself to be overpersuaded into manipulating a

touch-flag, and that every time he raised his arm his sleeve immediately filled with snow—his shoes had already been full of snow for some time.

It seemed a mistaken idea of the right tactics on such a day to throw the ball about with such abandon, particularly as the ball itself was like a lump of greased ice: indeed, frozen hands and the state of the ball and the ground made Bart.'s repeated attempts at passing movements appear lunatic. It is admitted that Bart.'s first try followed a short round of passing and an opening by North which was finished off by Armstrong, but subsequent failures should surely have dictated a change in policy. The forwards were excellent in the loose, Collinson's dribbling often taking the ball long distances; Gauvain and Barclay also distinguished themselves, although it was Gauvain, and some feeble tackling by the backs, who presented the Harlequins with a gift try under the posts by hurling the ball into the swirling gloom under the goal-posts from a line-out on his own goal-line. Ellis and Mullan brought off some good tackles, and Nel brought off some fine kicks to touch. Miller worked hard at the base of the scrum, and scored Bart.'s second try from a scrum near the line; his passing was quick, erratic, and quite useless on such a day. The Harlequins, having scored a penalty goal and converted their gift try, won a scrappy game by 8 points to 6.

Team: J. G. Nel; P. L. Armstrong, A. M. Jokes, J. North, B. Jackson; B. Alexander, J. E. Miller; A. R. P. Ellis, J. Mullan, P. G. Jefferies, A. G. Spafford, H. King, J. H. Gauvain, P. S. Barclay, P. C. Collinson.

* * *

The match against **Bedford** on December 4th at Bedford was lost by 2 goals, 1 penalty goal and 1 try (16 pts.) to *nil*. This match was played in a snow-storm and consequently good orthodox football was out of the question. There were several amusing mishaps which thawed the freezing spectators into laughter and cheers. From the kick-off Bart.'s pressed and remained in the Bedford half for some time, scrambling play being punctuated by many scrums, caused by the inability to handle the snow-capped ball. Bart.'s should have been awarded a penalty try when Mundy dribbling away from a loose scrum was held by an "Abominable Snowman" when he had but to tap the ball another yard and touch down. But the unfortunate referee, half-frozen and sheltering from the stormy blast away in the distance, did not see this. Just before half-time from our 25 line Sime kicked a penalty goal awarded for a scrum infringement. Then a few minutes later from the first passing movement of the game, Bedford scored in the corner and Sime converted. Bart.'s were not adapting their game to the conditions, and getting more than their share of the ball from the scrum, continually started passing movements which broke down almost as soon as begun, or kicked into the very safe hands of the Bedford full-back. When we did copy the hard dribbling of the Bedford pack it was usually a duet by Mundy and Burrow with no backing-up by the rest. There was some delightful cross-talk by the scrum halves which ended when Sime left to drag the snow-covered referee, who was making an igloo behind the Bart.'s scrum, to watch the nefarious tricks performed by Hearn and Moynagh. Bedford scored two further tries as a result of their kick-and-rush tactics, one of which was converted.

It is a great pity that better conditions did not prevail for this game, because I think we would have broken our sequence of defeats there. The tackling of the team as a whole was an improvement, Candler especially getting through a tremendous amount of work. It was the ideal day for the almost forgotten art of wheeling, the practice of which is so strongly urged by Mr. Capps and Howard Marshall.

* * *

The game v. **R.M.A. Woolwich** was played at Woolwich under depressing conditions, climatically speaking. A steady drizzle persisted throughout the game, accompanied by a cold wind blowing almost straight down the field.

The "Shop" won the toss and chose to play against the wind. The play was scrappy for the first ten minutes, but then the Bart.'s forwards started to get settled down and supply their backs with the ball and almost immediately a try resulted through Pleydell, who, getting the ball, ran strongly for the corner and scored. Irving failed with the kick.

This was very quickly followed by another try. Candler broke through and passed to Griffiths, who scored in the corner. Macpherson failed at goal.

The "Shop" from the kick-off carried the play to the Bart.'s "25" and here some scrappy play brought the opposition

dangerously close to the Bart.'s line, but the situation was saved by Laybourne and Pleydell realizing that backs have feet as well as hands, and they dribbled the ball in fine style to the half-way line when it went into touch.

Pleydell almost scored again after a fine cut through by Coupland, but he was pushed into touch on the line. In this run of his Pleydell illustrated the effectiveness of the hand-off. From the line-out the ball came out to Candler, who kicked diagonally to the opposite corner and Griffiths won the race with his *vis-à-vis* for the touch down. Irving failed with the kick.

The second half was more scrappy, due to the ground becoming muddier and the ball more difficult to handle and play therefore passing up and down the field. Bart.'s scored twice before the end. A penalty for lying on the ball too long was awarded against the "Shop" in front of their goal and Macpherson was successful. Just before the final whistle Candler broke through and sold a beautiful dummy to score under the posts. Macpherson added the extra points.

The final whistle saw Bart.'s the winners by 17 pts. to *nil*. Bart.'s thoroughly deserved to win. The backs handled the slippery ball well and the forwards gave them plenty of opportunities, as they got the ball nine times out of ten. Graham and Irving were the best of the forwards.

Team: G. C. Mackay; M. J. Pleydell, M. Laybourne, R. T. G. Coupland, E. Griffiths; P. L. Candler, R. D. Hearn; G. D. Graham, K. D. Moynagh, P. D. Swinstead, K. G. Irving, R. L. Hall, P. C. Collinson, R. Macpherson, K. C. Burrow.

* * *

Conditions, considering the doubtful weather of the morning were excellent for the match v. **Southampton Trojans** and ideal for fast, open football, but it was not till the second half of the game that the spectators began to get their money's worth. The first half was scarcely worthy of comment—scrappy, lifeless forward play by both sides, combined with ineffective three-quarter movements. After a quarter of an hour's play D. H. Banks scored an opportunist's try for the Trojans near the corner flag, although very well tackled by Candler as he touched down. The kick failed. There was no further scoring before half-time, and Bart.'s were unfortunate to lose Griffiths, who pulled a hamstring, and, although pluckily refusing to leave the field, was virtually a passenger for the rest of the game.

Soon after the resumption, Candler, after a good, swerving run, scored in the corner, and Macpherson, with an excellent kick, added the extra points. Having once established a lead, the Hospital forwards began to pull themselves together, and, even with Burrow on the right wing, managed to get the ball in four out of five scrums—a tribute to Moynagh's hooking. Bart.'s further increased their lead, when Macpherson kicked a penalty goal from an easy position, and Swinstead touched down after a well-combined forward dribble, the try being converted by Macpherson.

Continuing to exert great pressure, the Hospital forwards again dribbled over the line, and Greenberg scored; shortly after this Candler dropped an astonishingly good goal from a long way out.

The side owed its victory very largely to the activities of their halves, Candler and Hearn, while Pleydell on the left wing, though not getting nearly enough of the ball, kept the defence on the hop throughout. Among the forwards in the second half Mundy, always conspicuous, Swinstead and Greenberg caught the eye. It would seem, however, that the Hospital plays better when it is leading.

Result: St. Bartholomew's Hospital 20 points; Southampton Trojans 3 points.

Team: J. W. G. Evans; M. J. Pleydell, M. Laybourne, G. L. Way, E. Griffiths; P. L. Candler, R. D. Hearn; M. J. Greenberg, K. D. Moynagh, P. D. Swinstead, R. Macpherson, R. L. Hall, R. Mundy, J. North, K. C. Burrow.

* * *

The perfect December day (18th) on which the match between Bart.'s and **Cross Keys** was played was in itself sufficient reward for those who had summoned up enough energy to leave their firesides and travel down to the Foxbury Athletic Ground. Had there been no rugger match, no one could have failed to enjoy merely standing on the crisp turf looking at that row of mist-heavy trees, golden in the winter sun. The heavens were therefore prodigally generous in contriving that so good a game should be played on so brave a day and in so fair a place. That it was a good game cannot be denied, and for three reasons: first that it was exciting to the

end; second that there were long spells of football as good as only Hospital and Welsh rugby can be—and only the “old-timers” know how good that is; third, because the rivalry, though keen, was friendly, both on the field and on the touch-line. Being strongly partisan, it is perhaps not unnatural that I should remember mostly the doings of our own side. There was Coupland's try—an opening, a swerve, a dummy, a fifty yard run, and *voilà*, the ball between the posts; Candler, always contriving some piece of cunning; Armstrong “corner-flagging” with his ears pinned well back; Mundy at the head of eight wolf-like forwards. An ardent Welsh supporter said to me afterwards that we had beaten them fairly at their own game. The truth is simpler even than that; we beat them forward. It was a grand sight to see the Bart.'s forwards heeling from the loose as well as from the tight, and playing the “line-outs” as though they were part of the game and not an opportunity for a rest. Much thanks is due to Moynagh for his excellent “hooking” against an old international, though he could not have done it had he not had the shove at the right time.

We opened the scoring with a try by Burrow following an exhilarating forward rush right down to our opponents' line. Their over-keenness to relieve caused them to be penalized shortly afterwards and Macpherson landed an excellent goal from nearly halfway. About five minutes later similar over-activity in defence caused us to be penalized and the Cross Keys' full-back landed an equally long and skilful goal. Then came Coupland's amazing run which has already been described, but it must also be said that it was not entirely individual, for it started with a quick heel from our pack on our opponents' “25”, and followed by a quick exchange between Hearn and Candler before reaching the scorer. Soon afterwards they scored from a line-out—it should not have happened, but it did—and the whistle blew for half-time, 11—6 in our favour. Shortly after the change-over our opponents scored another unconverted try following a very lively burst up the right wing, and the score remained with only a difference of 2 points until the end. Just what fun and how exciting was that last half-hour I will not insult your imagination by describing.

And furthermore, did we or did we not have a good time at the dance in the pavilion later on? Come out to Foxbury and ask me.

BOXING Inter-Firm Competition.—The Inter-firm Boxing Competition for the Girling Ball Cup will be held towards the end of January. Teams may be entered by all five surgical firms and by the three divisions of the Pre-clinicals. Competitors will represent their first surgical firm, or their present year in the Pre-clinicals. The weights are: heavy, middle, welter, light and feather. A team may enter only one representative at each weight.

A form will be posted for the entry of teams.

Any inquiries should be addressed to T. P. Storey, L. Taylor, or the Hon. Sec., R. H. Sandiford.

Match v. London Hospital.—On November 5th a team from Bart.'s boxed a team from London Hospital at the London. At bantam R. T. Routledge, boxing well against a larger man, beat R. S. MacDonald of London on points. T. J. Brady, at feather, beat G. E. Newell of London, the loser, in spite of lack of training, putting up a very good fight. W. J. Atkinson, a greatly improved boxer, did well to beat W. E. Mahon, the London first string light-weight. In the second fight of the light-weights M. C. Sanyal of Bart.'s fought pluckily against H. Zalondele, but lost on points. In the welters J. W. G. Evans was unlucky in losing on points to G. P. Scott of London, a bigger and heavier man. The boxing in this bout was of a very high order. E. Leviné, of Bart.'s, beat E. Barry-Smith of London on points in the first bout of the middle-weight series. In the second fight of the middle-weights K. D. James of Bart.'s and G. H. Gunsen of London, casting aside the science of boxing, gave us a great and bloody fight. James won on points. D. W. Mahon beat R. S. Henderson of Bart.'s on points in the light-heavies. So Bart.'s won a very enjoyable evening's boxing, between two well-matched teams, by five fights to three.

The **United Hospitals B.C.** met the **Oxford University B.C.** at St. Bartholomew's Hospital Medical School, Charterhouse Square, by kind permission of the Dean, on Friday, November 26th.

Results.—United Hospitals 6 bouts, Oxford University 5 bouts. J. W. G. Evans, B. J. Atkinson, R. T. Routledge and T. Brady of Bart.'s were unable to accept invitations, R. S. Henderson being the only representative of this Hospital actually to fight.

Fly-weight.—J. S. Billimoria (Oxford) beat R. L. Ray (Guy's) on points.

Bantam-weight.—E. Harvey (Guy's) beat A. D. Bushers (Oxford) on points.

Feather-weight.—D. A. White (Guy's) beat J. B. Segal (Oxford) on points.

Light-weight: first string.—A. A. Halamandres (Guy's) beat J. I. C. Taylor (Oxford) on referee's casting vote. A delightful fight to watch. Both showed remarkable speed, with real scientific boxing.

Second string.—R. C. H. Risley (Oxford) beat G. McPlatfield (London) in second round.

Welter-weight: first string.—C. E. J. Glaisher (St. Thomas's) beat E. F. Allison (Oxford) in second round.

Second string.—K. D. Potter (Oxford) beat R. Lomax (Guy's) on points.

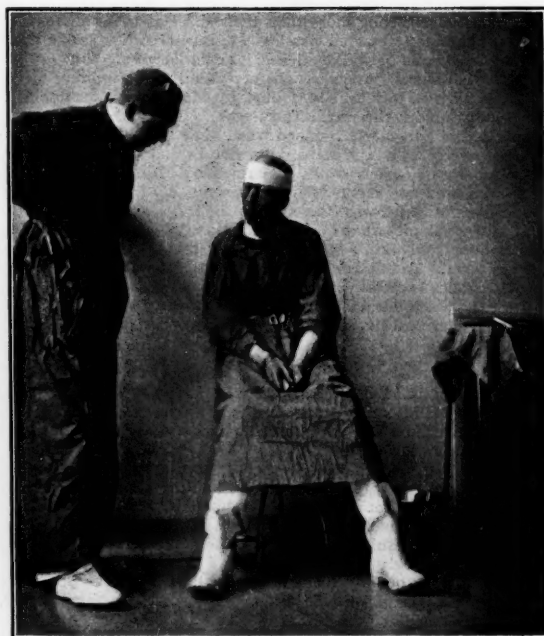
Middle-weight.—R. S. Henderson (Bart.'s) beat J. F. D. Radice in the third round. Henderson put up a very good performance. His boxing has improved a great deal this year. He fully made use of his long reach and straight left to outbox his opponent, who was game throughout.

Light-heavyweight: first string.—N. B. Beyte (Oxford) beat W. Roes (St. Mary's) on points. One of the best fights of the evening. Beyts kept cool and met Roe's onslaughts with beautiful straight lefts. A very close verdict.

Second string.—I. Donkin (Oxford) beat R. P. G. Sandon (King's) on points.

Heavy-weight.—J. G. McGavin (St. Mary's) beat E. C. Wynter (Oxford) in 1st round. As previously, the result of the match depended on McGavin. He worthily responded, wading in to his man, and within 30 seconds put his man down, for the referee to stop the fight.

OUR CANDID CAMERA



“I endeavour to give satisfaction, Sir.”

EXAMINATIONS, ETC.

University of Oxford

The following Degree has been conferred :

B.M.—Furber, S. E.

University of Cambridge

The following Degrees have been conferred :

M.D.—Sen, S. K.

M.B., B.Chir.—Jeremy, W. H. R.

M.B.—Cope, J. W., Maddox, F. C., Neill, E. J., Stamp, T. C.

University of London

Third (M.B., B.S.) Examination for Medical Degrees,
November, 1937.

Pass.—Ashton, D. R., Barnard, E. J. W., Bradley-Watson, J. D., Brentnall, G. C., Cates, B., Darke, G. H., Ennis, J. E., Hambly, E. H., Herbert, G., Mountjoy, E. R., Roy, A. N., Thomson, R. W., Williams, A. M.

Supplementary Pass List.

Group I.—Bateman, A. D., Ellis, B. H., Fairlie-Clarke, G. A., Jack, A. H., Rutherford, S. T., Stephens, A., Thompson, J. W., Waring, J. W. B.

Group II.—Briggs, G. D. S., Dale, L. F., Dubash, J. J.

Royal Colleges of Physicians and Surgeons

The following Diplomas have been conferred :

D.A.—De Freitas, A. J. S., Gray, G., Prothero, D. A.

Society of Apothecaries of London

Final Examination, November, 1937.

Surgery.—Anderson, J. D., Young, G. L.

Midwifery.—Berman, B.

The **Diploma** of the Society has been conferred on :
Anderson, J. D.

CHANGES OF ADDRESS

- BACH, F. J., 1a, Devonshire Place, W. 1.
BARNESLEY, Lt.-Col. R. E., R.A.M.C., Officers' Mess, Depot, Royal Army Medical Corps, Crookham Camp, Aldershot.
BAXTER, W. S., Ferndale, Torquay.
BRODRIBB, H. S., 1, Whitehall Mansions, 15, Warrior Square, St. Leonards on Sea.
COHEN, E. L., 87, Regency Lodge, Avenue Road, N.W. 3.
CUTHBERT, T. M., 713, Tonbridge Road, Maidstone. (Tel. Barming 86115.)
DIPPLE, P. E., Redstacks, Sawbridgeworth, Hertfordshire.
SOLTAU, K., 19, The Avenue, Clifton, Bristol 8. (Tel. Bristol 36502.)
TURNER, P. E., 19, Trinity Close, Clapham Common, S.W. 4. (Tel. Macaulay 1229.)
WARE, A. M., Tyting Down, White Lane, Guildford. (Tel. 1622.)
WILLIAMS, T. P., 22, Park Lane, East Croydon, Surrey. (Tel. Croydon 5080.)

APPOINTMENTS

- ANDERSON, R. G., M.D., M.R.C.P., appointed Honorary Physician to Cheltenham General Hospital, Cheltenham.
BRODRIBB, H. S., B.M., B.Ch.(Oxon.), appointed Honorary Anaesthetist to the Royal East Sussex Hospital, Hastings.

BIRTHS

- DONALDSON PERROTT.—On November 22nd, 1937, at Suffolk House, Stanmore, to Louie, wife of Dr. G. F. Donaldson Perrott—a son (Andrew Charles).

FOWLER.—On December 10th, 1937, at Winton Lodge, Crowborough, to Agatha Clare, wife of Dr. Eric Fowler—a son.

McMENEMEY.—On October 26th, 1937, at "Stonefield", Blackheath, to Robina and William McMenemy, of "The Rookery", Brize Norton, Oxon—a son.

SCOTT-BROWN.—On December 18th, 1937, at 61, Harley Street, W. 1, to Peggy, wife of W. G. Scott-Brown, F.R.C.S.—a daughter.

SHACKLETON BAILEY.—On December 5th, 1937, at Grove House, Norwich, to Dorothy, wife of Dr. J. Shackleton Bailey, of Eye, Suffolk—a son.

STEELE SCOTT.—On December 5th, 1937, at Adelaide, South Australia, to Kathleen (*née* Muers), wife of Dr. John Steele Scott—a son.

MARRIAGES

BLOMFIELD-MILLER.—On October 18th, 1937, at the Cathedral of the Highlands, Nairobi, Kenya, by the Right Reverend the Bishop of Mombasa, Douglas Miles Blomfield, M.B., B.S., to Kathleen May Miller, elder daughter of Mr. and Mrs. A. W. H. Miller, of Everley, Arundel Road, Cheam.

CUTHBERT-LOTT.—On November 13th, 1937, at Aylesford Parish Church, Kent, by the Rev. Canon F. J. Everett, Dr. Theodore Martin Cuthbert, son of Dr. and Mrs. Cuthbert, of Gidea Park, to Dorothea Edith, daughter of Mr. H. Lott, of Laddingford, and the late Mrs. Lott.

REAVELL-SWINBURNE.—On December 4th, 1937, quietly at St. Andrew's, Totteridge, Denys Clowes Reavell, M.D., B.S., second son of Mr. and Mrs. J. A. Reavell, of Waylands, Beckenham, to Doris Margaret, eldest daughter of Mr. and Mrs. F. R. Swinburne, of Wylde Green, Warwickshire.

SWAIN-HART.—On November 27th, 1937, at St. Bartholomew-the-Great, Dr. Richard Austin Swain, son of the late C. H. Swain and Mrs. Swain, to Margaret Helen Hart.

DEATHS

ALDRIDGE.—On December 4th, 1937, at 35, Browning Road, Worthing, Major Edward Arthur Aldridge, late R.A.M.C. and R.A.F.M.S.

DOWNER.—On November 28th, 1937, at a nursing home in Birmingham, after an operation following a long-drawn-out illness, bravely borne, Reginald L. E. Downer, M.D.(Lond.), M.B., B.S., M.C.O.G., (ex-R.A.M.C.), of 9, College Hill, Shrewsbury, aged 53.

HAMILTON.—On December 10th, 1937, the result of a railway accident, William Gavin Hamilton, Lt.-Col. I.M.S. (ret.), formerly Inspector-General of Jails, Bengal, of Dunaivon, Rhu, Dumbartonshire, lately of Warwicks Beach House, Guildford.

O'CONNOR.—On October 2nd, 1937, Francis William O'Connor, M.R.C.S., L.R.C.P., D.T.M.&H.(Camb.), of New York City, U.S.A.

QUENNEL.—On November 22nd, 1937, Dr. Robert William Quennell, of The Mitre House, Brentwood, Essex.

SANDERS.—On December 18th, 1937, at 53, Ennerdale Road, Kew Gardens, Richmond, Surrey, Dr. Charles Sanders, formerly Medical Officer of Health for West Ham, aged 78.

SCOTT MORRISON.—On December 1st, 1937, passed peacefully to sleep at Anchorlea, Walberswick, Suffolk, Katherine Corkhill Scott Morrison. (At St. Bartholomew's from 1892 to 1896.)

WOOD.—On November 21st, 1937, at Oxford, Frank Herbert Wood, F.R.C.S., L.R.C.P., late of Bampton, Oxford, son of the late Dr. Wood, of Enfield.

NOTICE

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, E.C. 1.

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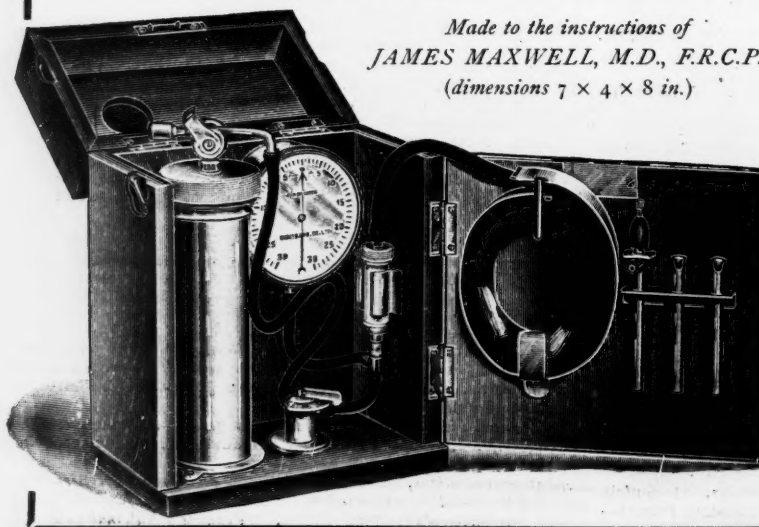
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CONTENTS

	PAGE		PAGE
Calendar	102	Dr. Jekyll Diagnoses Mr. Hyde (continued).	
Editorial	102	By Sir Walter Langdon-Brown, M.D.,	
Current Events	104	F.R.C.P.	114
News from Outside	106	Correspondence	118
An Aspect of Public Health in the Spanish		Sports News	120
Republic. By K. W. C. Sinclair-Loutit	107	Our Candid Camera	121
Youth at the Helm. By "O"	109	Reviews	122
Recent Additions to the Museum. By R. G.		Recent Books and Papers by St. Bartholo-	
Anderson, M.D., M.R.C.P.	112	mew's Men	123
		Official Matter	124
		Index to Advertisements	101

INDEX TO ADVERTISEMENTS

	PAGE		PAGE
Allen & Hanburys Ltd. Examination Lamp	iv	Mundesley Sanatorium, Norfolk	v
Benger's Food	iv	Paripan Ltd.	iii
Books—		Parke, Davis & Co. 'Mapharside'	vi
Adlard & Son, Limited The Fundus Oculi	i	Ronuk	ii
Lewis, H. K., & Co. Ltd. Books for Students	ii	St. Bartholomew's Hospital	
Boots Pure Drug Co. Ltd. Bismostab	iii	Medical College .. Preliminary Scientific Department	viii
Brand & Co., Ltd.	vii	Ditto .. Scholarships; Bacteriology ..	viii
Clinical Research Department of St. Bartholomew's Hospital	x	Ditto .. Fellowship Classes; Entrance	ix
Down Bros. .. Surgical Instrument Manufacturers	x	Scholarships	ix
Evans & Witt .. Booksellers, Stationers, etc. ..	iv	St. Bartholomew's Trained Nurses' Institution	iv
Holborn Surgical Instrument Co. Ltd.	i	Virol	vi
Maw, Son & Sons, Ltd. Maw Sterotherm	v	White Hart Hotel	iv
		Willans, G. J. Transfer of Practices, etc.	ii